



Cost and Coverage Impacts of Options for Expanding Health Insurance Coverage in Iowa

Final Report

Prepared for:
The Iowa General Assembly

By:
The Lewin Group

August 13, 2008

Table of Contents

Executive Summary	1
I. Introduction.....	5
II. Expanding Eligibility for the Iowa Medicaid and Hawk-i Programs	7
A. Iowa Medicaid and Hawk-i Eligibility.....	7
B. Coverage Expansion for Children in 2009.....	9
C. Coverage Expansions for Adults	11
III. Public Program Eligibility Expansion.....	14
A. Medicaid Expansion with Waiting Period	14
B. Medicaid Expansion without Waiting Period	17
C. Medicaid Expansion with Automatic Enrollment.....	19
IV. Combining a Medicaid Expansion with Premium Subsidies	21
A. Impact of Illustrative Coverage Expansion Program	22
B. Alternative Premium Subsidy Schedules	25
C. Waiting Period Requirements for Premium Subsidies.....	29
D. Immigration Status	31
E. Benefits Packages	33
V. Mandatory versus Voluntary Enrollment.....	37
A. Issues with Automatic Enrollment.....	37
B. Coverage Effects.....	38
VI. Requiring Employers to Offer Section 125 Plans.....	41
VII. Federal Matching Funds	43
VIII. Summary of Results.....	45
Appendix A: Estimates of Health Spending in Iowa for Calendar Year 2009	A-1
Appendix B: Summary Description of the Health Benefit Simulation Model (HBSM).....	B-1

Executive Summary

The purpose of this report is to present estimates of the cost and coverage impacts of various options for further expanding health insurance coverage in Iowa. Because Iowa recently enacted legislation which expanded insurance coverage for children, the options that we analyze here would focus primarily on coverage for adults.

Iowa recently enacted legislation (HF 2539) to increase the income eligibility level for children under the hawk-I program from 200 percent of the Federal Poverty Level (FPL) to 300 percent of the FPL, which is approximately \$60,000 for a family of four, beginning July 1, 2009. The legislation will cover about 30,000 of the estimated 53,000 children in the state who are now uninsured. Nearly all of the children who remain uninsured are in families with incomes over 300 percent of the FPL.

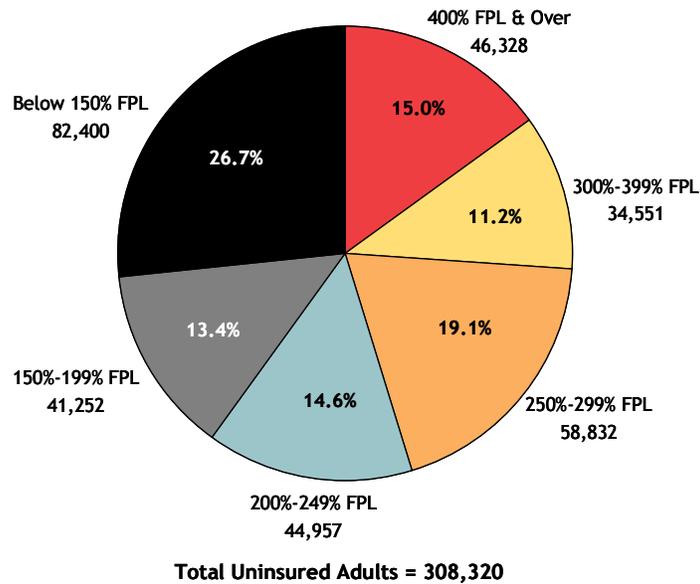
A. Uninsured Adults

In this study, we estimate the impact of expanding coverage for adults over the age of 18. Under the current Iowa Medicaid program, parents in families with children are eligible for Medicaid if their income is below 71 percent of the FPL. Pregnant women living below 200 percent of the FPL are also eligible. Non-disabled adults under age 65 without custodial responsibilities for children are not eligible for full Medicaid benefits at any income level. However, select groups of adults living below 200 percent of the FPL who are not eligible for Medicaid do qualify for limited benefits under the IowaCare program.

There are about 308,300 people in Iowa over age 18 who are without health insurance (*Figure ES-1*). About 26.7 percent of these adults have incomes below 150 percent of the FPL. About 58.3 percent of uninsured adults have incomes between 150 percent of the FPL and 400 percent of the FPL. Only about 15 percent of uninsured adults (46,300 adults) in the state have incomes over 400 percent of the FPL.

In this study, we estimated the cost of expanding Medicaid eligibility for adults to 150 percent of the FPL. In addition, we estimated the cost of a program that would provide subsidies for adults to purchase private insurance coverage. People would be provided with premium subsidies sufficient to cap what they pay in premiums to no more than a specified percentage of family income (i.e., 2.0 percent to 6.5 percent). The premium subsidy program would extend to children under 400 percent of the FPL who are not eligible for hawk-i.

Figure ES-1
Uninsured Adults in Iowa: By Income as a Percent of the FPL: CY2009



Source: The Lewin Group projections based on the Iowa sub-sample of the Current Population Survey (CPS).

B. Medicaid Expansion

We estimate that about 230,500 adults in Iowa would be eligible for the program (*Figure ES-2*). Of these, about 141,700 would enroll including 106,500 currently uninsured people. About three quarters (110,700) of those who enroll would be adults who do not have custodial responsibilities for children, reflecting that this group currently is not eligible for full Medicaid benefits at any income level.

Figure ES-2
Enrollment and costs Under Medicaid Expansion Assuming Full Implementation in 2009

	Number of Eligible People	Number of People Enrolled	Reduction in Uninsured	Total Costs per Enrollee Month	Program Costs (thousands) ^{a/}		
					Total Cost	State Share	Federal Share
All Below 150 Percent of FPL							
Children	4,594	4,594	3,944	\$175	\$9,647	\$3,666	\$5,981
Parents	40,849	26,417	23,544	\$391	\$123,949	\$47,100	\$76,848
Non-Custodial Adults	185,085	110,691	79,057	\$439	\$583,120	\$583,120	\$0
Total	230,528	141,702	106,545	\$421	\$716,716	\$633,887	\$82,829

a/ Assumes federal matching funds are available for Medicaid children and parents only.
 Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

About 26,400 parents with incomes between 71 percent (current eligibility level) and 150 percent of the FPL would enroll. In addition, we estimate that another 4,600 children would be enrolled as a consequence of the program. These include children who are currently eligible but not enrolled, who would become covered as their newly eligible parent(s) enrolls.

The program would cost \$716.7 million if it were fully implemented in 2009. Prior to the fall of 2007, the federal government would provide matching funds for parents and newly enrolled children, which would come to about \$82.8 million in funding. Since that time, the Bush administration took the controversial step of refusing to provide federal funds for new expansions in eligibility. Because this policy may change with the new administration, the federal match should be considered a potential funding source. With these matching funds, the cost to the state would be \$633.9 million.

C. Premium Subsidy Program

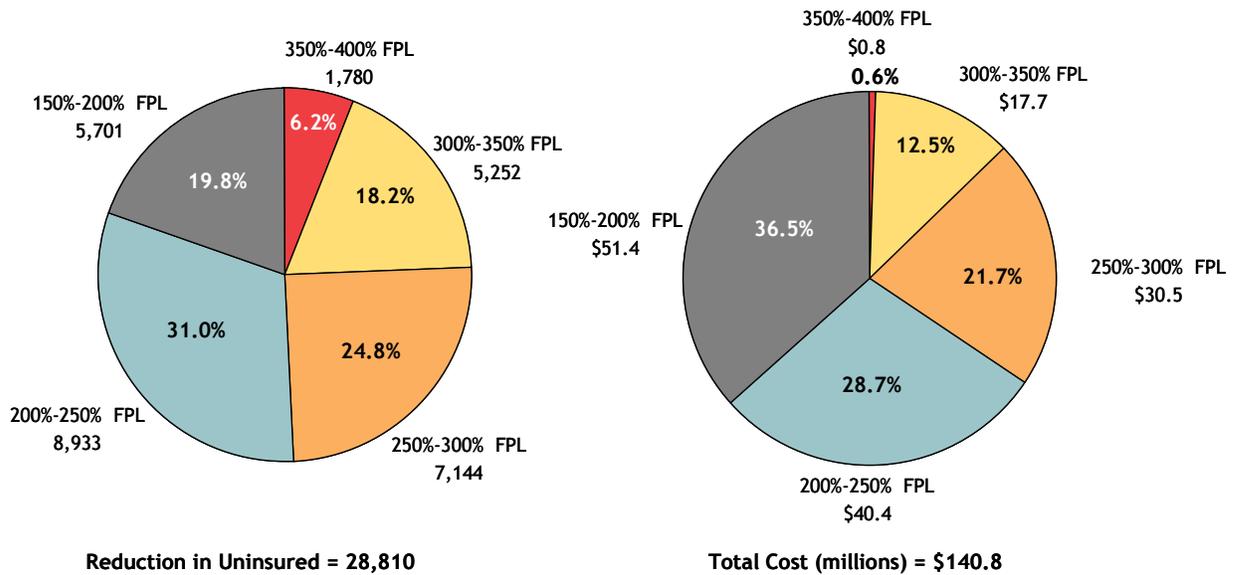
We estimated the impact of creating a premium subsidy program for people with incomes between 150 percent and 400 percent of the FPL. We assume that the subsidies would be set at the levels required to limit family health spending as a percent of family income. These caps would range from 2.0 percent of income for people living between 150 percent and 200 percent of the FPL to 6.5 percent of income for people with incomes between 350 percent and 400 percent of the FPL. These family income limits are based upon those recommended for study in HF 2539.

We assume that the subsidy would be available for a benefits package comparable to the Blue Cross/Blue Shield “standard option” provided to federal workers. This benefit covers a broad range of services including prescription drugs, mental health and dental care. For in-network utilization, the plan has no deductible and a \$15 co-payment for in-network utilization.

A key feature of this option is that we assume that people are required to have been without employer coverage for at least six months before enrolling. This waiting period rule is intended to discourage workers and employers from canceling their coverage and shifting to the premium subsidy program by making people first go without insurance for six months before they can enroll. This provision is important because many adults living below 400 percent of the FPL already have employer coverage and could potentially shift to the premium subsidy program.

The program would cover about 44,500 people, many of whom are low-income adults who are already purchasing non-group coverage. The premium subsidy program would cover about 28,800 uninsured adults. Total program costs would be about \$140.8 million. *Figure ES-3* presents our estimates of the distribution of new enrollees would be distributed by income level.

Figure ES-3
Reduction in Uninsured and Program Costs for the Premium Subsidy Program



D. Combined Impacts

The combined impact of implementing the Medicaid expansion and the premium subsidy program through 400 percent of the FPL would be to reduce the number of uninsured in Iowa by about 135,400 people. The number of uninsured adults would drop from 308,300 people to about 172,900 people. Another 4,600 children would also obtain coverage as a result of the expansion. The cost of these programs would be \$857.6 million if fully implemented in 2009.

E. Other Policy Options

We also present in this report estimates of the cost and coverage impacts of variations on these policy options. Estimates include the following:

- Alternative premium subsidy schedules;
- Changes in the 5-year waiting period for non-citizens;
- Alternative benefits packages;
- Automatic enrollment options;
- A coverage mandate with penalties; and
- Requiring employer Section 125 Plans.

I. Introduction

Several states are considering proposals to expand health insurance coverage. These proposals typically include an expansion in the existing Medicaid and Children's Health Insurance Program (SCHIP) for people with very low incomes, combined with subsidies for private insurance for people with incomes too high to qualify for Medicaid or SCHIP but too low to be able to afford coverage. However, the cost and coverage impacts of such programs will vary widely depending upon the benefit package, income eligibility levels, subsidy amounts and enrollment methods.

In this study, we estimate the impact of several variations on these proposals for Iowa. Our analysis is designed to serve as a primer on health care reform design issues that could be used as a guide to designing future coverage expansion proposals for the state. This guide will enable the General Assembly to design incremental expansions in coverage by income level and category of eligibility including children, parents and non-custodial adults.

We estimated the impact of an illustrative coverage expansion that would provide subsidized health insurance coverage to all people living below 400 percent of the FPL. Because Iowa's recently enacted Health Care Reform bill HF 2539 increased income eligibility under the Health and Well Kids in Iowa (hawk-i) program (i.e., Iowa's SCHIP program) to 300 percent of the FPL for children beginning July 1, 2009, the expansions we modeled here affect primarily adults. These include parents with custodial responsibilities for children, whose income exceeds the current eligibility threshold of 71 percent of the FPL under the Medical Assistance (Medicaid) Program, and other non-disabled adults under age 65 who are not now eligible for full benefits under the Iowa Medicaid program at any income level.

For illustrative purposes, we assume that all eligibility expansions become fully effective in January of 2009, even though it would be at least a year to legislate and implement these proposals. To simplify presentation, we also assume that the recent hawk-i expansion is fully implemented in January of 2009. Thus, all estimates labeled "current law" assume that the hawk-i expansion is fully implemented. These include our estimates of the number of uninsured children.

This study illustrates how program coverage and costs vary across various design parameters such as:

- Enrolling eligible but not enrolled people in public programs
- Expanded coverage of children, parents and other adults
- Variations in eligibility by income level for children and adults
- Alternative health benefits packages
- Alternative premium subsidy packages
- Mandatory versus voluntary coverage
- Automatic enrollment methods

Prior to the fall of 2007, states had the option of increasing income eligibility levels for children and custodial parents under the Medicaid Program. A “plan amendment” was required, but it was not necessary to apply for a waiver. However, since that time, the Bush administration took the controversial step of refusing to provide federal funds for new expansions in eligibility for these groups. Because many observers believe that this policy will change with a future administration, we have included estimates of total program costs and the amounts that the state and the federal governments would pay if the prior rules are restored.

We used The Lewin Group Health Benefits Simulation Model (HBSM) to analyze the costs and coverage impacts of each alternative health care reform for Iowa. The model is a micro-simulation model of the U.S. health care system which is used to estimate the number of people potentially eligible for state-level coverage expansions and the number of people enrolling. *Appendix A* describes our estimates of calendar year 2009 Iowa health spending that were used as the basis for all of our modeling impacts. We provide more detail on the HBSM and how it was used to model key aspects of the reform alternatives in *Appendix B*.

We present our analyses in the following sections:

- Expanding eligibility for the Iowa Medicaid and hawk-i programs;
- Public program eligibility expansion;
- Combining a Medicaid/hawk-i expansion with premium subsidies;
- Mandatory vs. voluntary enrollment;
- Reducing worker costs with Section 125 plans; and
- Federal matching funds.

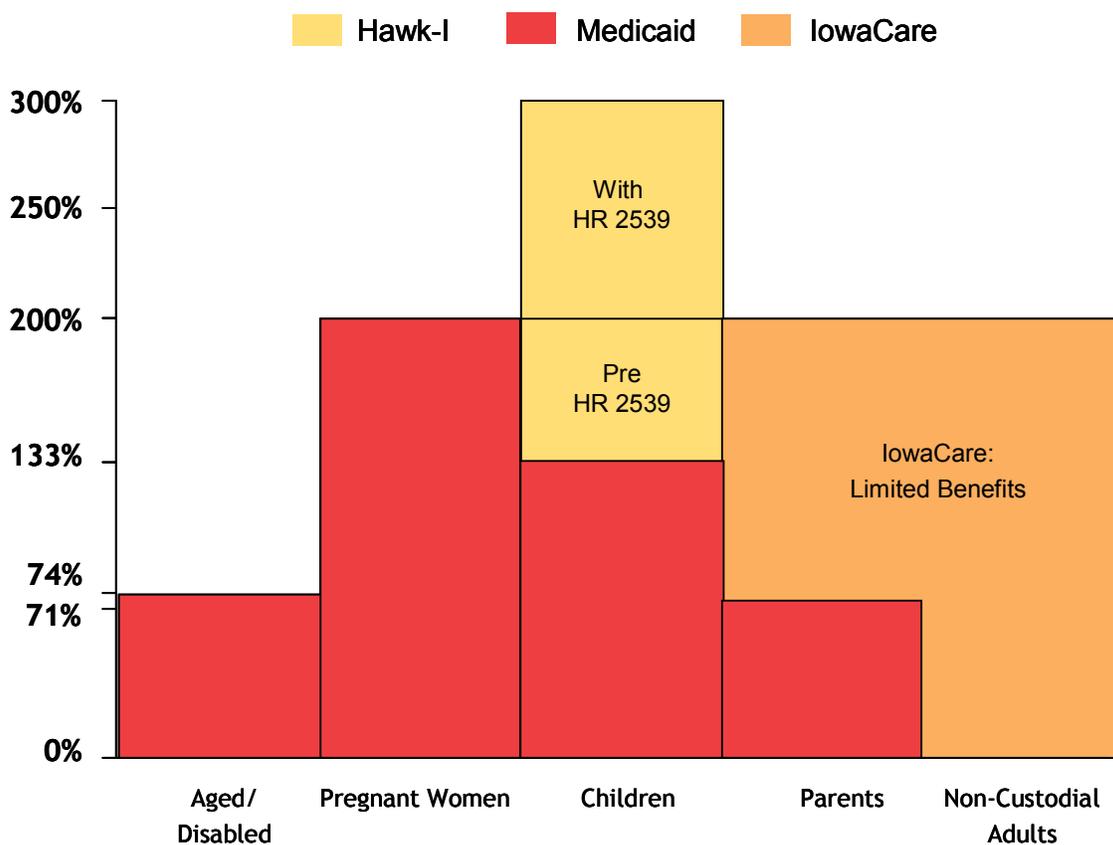
II. Expanding Eligibility for the Iowa Medicaid and Hawk-i Programs

The Iowa General Assembly recently passed landmark legislation outlining a pathway for expanding coverage in Iowa. House File 2539 (HF 2539), increases income eligibility for children under the hawk-i program, initiates outreach to increase enrollment among those who are already eligible, and requires the Department of Human Services to implement procedures for increasing enrollment among those who are eligible but not enrolled in Medicaid and hawk-i. It also requires the Iowa Comprehensive Health Insurance Association to develop a comprehensive plan to first cover all uninsured children by building upon existing public programs and then to provide access to private, unsubsidized, and affordable coverage for children and adults who do not qualify for Medicaid or hawk-i.

A. Iowa Medicaid and Hawk-i Eligibility

Figure 1 depicts eligibility for existing public programs in Iowa as expanded under HF 2539. Under HF 2539, eligibility for infants and children under hawk-i is increased to 300 percent of the FPL beginning July 1, 2009. Children with incomes below 133 percent of the FPL are covered under the Medicaid program while children between 133 percent of the FPL and 300 percent of the FPL are covered under hawk-i.

Figure 1
Coverage under Iowa Health Care Programs as of July 1, 2009



Hawk-i uses a 20 percent earned income disregard that effectively increases the income eligibility level for pregnant women with earnings to as much as 250 percent of the FPL.

The hawk-i program requires premium contributions for people living at or above 150 percent of the FPL. Premiums are \$10 per child per month up to \$20 per family for people with incomes between 150 percent and 200 percent of the FPL. For people between 200 percent and 300 percent of the FPL there will be a graduated premium determined by the hawk-I board.¹

The Iowa Medicaid program covers parents with custodial responsibilities for children through 71 percent of the FPL, which reflects the 20 percent earned income disregard. Medicaid covers elderly and disabled Iowans through 74 percent of the FPL.

Adults who do not have custodial responsibilities for children are generally ineligible for Medicaid at any income level unless they qualify as disabled or aged. However, adults who are not otherwise eligible for Medicaid may be eligible for the IowaCare program. IowaCare provides coverage for a limited set of services at primarily two facilities in the state to adults aged 19 through 64 who have incomes at or below 200 percent of the FPL and meet other program criteria. IowaCare eligible people include:

1. People age 19-64 who:
 - Have adjusted income at or below 200 percent of the FPL;
 - Do not have access to other health insurance;
 - Are not otherwise eligible for Medicaid (childless adults, parents of Medicaid children or hawk-i children who are over the Medicaid income eligibility levels; and
 - Meet all other conditions of participation, including requirements to pay a premium.
2. Women who are eligible for the Family Planning waiver may also receive benefits under IowaCare;
3. Pregnant women and newborn infants in families with household incomes of 300 percent or less, assuming deductions for medical bills reduce family income to 200 percent or less of the FPL; and
4. People who do not meet the 200 percent of FPL test but who receive State Papers services for chronic health problems.

Under federal law, these programs do not cover undocumented immigrants and lawful immigrants who have been in the country for less than 5 years, except emergency services if income eligible.

¹ For purposes of cost estimation, we assumed the monthly premium for these children will be \$20 per child up to \$40 per family.

B. Coverage Expansion for Children in 2009

HF 2539 increased income eligibility for children under the hawk-i program from its prior level of 200 percent of the FPL to 300 percent of the FPL beginning July 1, 2009. The program also implements initiatives designed to enroll uninsured children who are already eligible for these programs.

Beginning in tax year 2008, Iowa income tax filers may report the health insured status of children claimed as dependents on their tax returns. In cases where there are uninsured children who appear to be income-eligible for Medicaid or hawk-i, the program will notify these individuals of their likely eligibility for these programs.

The bill also requires the Iowa Department of Human Services (DHS) to develop a plan to maximize enrollment and retention of eligible children in the Medicaid and hawk-i programs. The DHS must review several approaches, at a minimum, including: streamlining enrollment; conditional eligibility; and expected renewal. Although HF 2539 does not direct DHS to utilize automatic enrollment, for purposes of our children's coverage expansion analysis, we assume that uninsured children participating in other income-tested programs such as food stamps would be enrolled automatically.

We estimate that without HF 2539 there would be 52,800 children in Iowa who do not have health insurance in 2009 (*Figure 2*). Of these, 18,965 live above 300 percent of the FPL and are therefore not eligible for hawk-i. We base these estimates upon the Iowa sub-samples of the Bureau of the Census Current Population Survey data for 2005 through 2007, which we have adjusted to correct for under-reporting of enrollment in Medicaid and hawk-i. We also adjusted these data to reflect projections of income and population growth.

Figure 2
Children under Age 19 by Income as a Percent of the Federal Poverty Level (FPL) in 2009

Income as a Percent of the Federal poverty Level (FPL)	Total Children in 2009	Uninsured Children: Without HF 2539	Number Newly Insured under HF 2539	Children Remaining Uninsured With HF 2539
Below 150% FPL	203,181	17,623	14,740	2,883
150-199% FPL	74,550	7,639	7,347	292
200-249% FPL	78,210	4,252	3,934	318
250-299% FPL	70,007	4,546	3,835	711
300-399% FPL	108,770	7,633	Na	7,633
400% FPL & over +	240,225	11,132	Na	11,132
Total	774,943	52,825	29,856	22,969

Source: Lewin Group Analysis of the Iowa sub-sample of the Current Population Survey data for 2005 through 2007, which was corrected for an underreporting of Medicaid/hawk-i enrollees using the Health Benefits Simulation Model (HBSM).

We estimated the cost and coverage impacts of the expansion in eligibility under hawk-i to include children living between 250 percent and 300 percent of the Federal Poverty Level (FPL). Children would be covered under the hawk-i benefits package. For these newly eligible children, we assume the family premium would be equal to \$20 per child up to a maximum of \$40 per family. We also estimated the impact of expanded outreach and automatic enrollment on program participation among the eligible but not enrolled population.

Figure 3 presents our estimates of the cost and coverage impacts of HF 2539 assuming it is fully implemented in 2009. We estimate that of the 52,800 children who do not have coverage in Iowa, about 29,900 children would become covered. These include 26,000 children already eligible but not enrolled in Medicaid or hawk-i and 3,800 newly eligible uninsured children with incomes between 250 percent and 300 percent of the FPL. Although not required under HF 2539, these estimates assume extensive use of automatic enrollment through the tax code and through other income-tested programs.

In addition, we estimate that about 1,066 of the newly eligible children who have private health insurance would drop that coverage and enroll in hawk-i to take advantage of the subsidized coverage. This shift of private to public coverage is called “crowd-out.” However, due to the monthly premium requirement, we estimate that few income-eligible people with employer coverage would not shift to the hawk-i program.

Total public program costs under the bill would be \$63.6 million net of premiums, of which \$12.9 million would be for the expansion group. The remainder (\$50.7 million) would be due to eligible but not enrolled children enrolling in the Medicaid and hawk-i programs.

The bill would implement the expansion in hawk-i beginning July 1, 2009, whether or not federal matching funds are approved. If federal matching funds are approved, the state share of program costs would be \$24.3 million with the federal government paying \$32.9 million.

Figure 3
Enrollment and Costs under HF 2539 Assuming Full Implementation in 2009 ^{a/}

	Public Program Enrollment	Uninsured Children who Become Covered	Monthly Cost ^{b/}	Total Benefits and Administrative Costs (1,000s)	Family Premiums (1,000s)	Net Program Costs (1,000s)	State Share (1,000s)	Federal Share (61.7%: 1,000s)
Below 150% FPL	14,740	14,740	\$175	\$30,954	\$0	\$30,954	\$11,855	\$19,099
150-199% FPL	7,347	7,347	\$152	\$13,401	\$620	\$12,781	\$4,895	\$7,886
200-249% FPL	3,934	3,934	\$152	\$7,176	\$252	\$6,923	\$2,651	\$4,272
250-299% FPL	4,901	3,835	\$233	\$13,703	\$801	\$12,902	\$4,942	\$7,960
300-399% FPL	NA	NA	NA	NA	NA	NA	NA	NA
400% FPL & over	NA	NA	NA	NA	NA	NA	NA	NA
Total	30,922	29,856	NA	\$65,234	\$1,673	\$63,560	\$24,343	\$39,217

a/ We assume that outreach is implemented together with automatic enrollment of income eligible uninsured children identified through other income-tested programs such as Food Stamps.

b/ Assumes average costs per-member per-month (PMPM) of \$233 in Medicaid and \$203 in hawk-i. We assume that costs in the expansions group would be more similar to Medicaid because they will include newborns not covered under the existing Medicaid program. We assume that costs for eligible but not enrolled children would be about 25 percent less than for those who are enrolled.

Source: Lewin Group Estimates.

C. Coverage Expansions for Adults

HF 2539 declares that “it is the intent of the General Assembly that all Iowans will have health care coverage, with the initial priority of covering all children eligible for Medicaid or hawk-i by January 1, 2011.” It also requires the Iowa Comprehensive Health Insurance Association to develop options to provide access to unsubsidized affordable coverage to children and adults who are not otherwise eligible for Medicaid or hawk-i. The goal is to develop health plans with a total contribution requirement for all cost-sharing expenses that are no greater than 2.0 percent of family income for children and 6.5 percent of income for families.

For many of the uninsured, it will not be possible to provide high quality coverage that meets these standards of affordability without also providing subsidies. As shown in *Figure 4*, there are about 308,300 uninsured adults in Iowa. Of these, about 82,400 (27 percent) have income below 150 percent of the FPL, which is about \$15,000 for a single individual. People in these lower income groups will need subsidized coverage if they are to become insured.

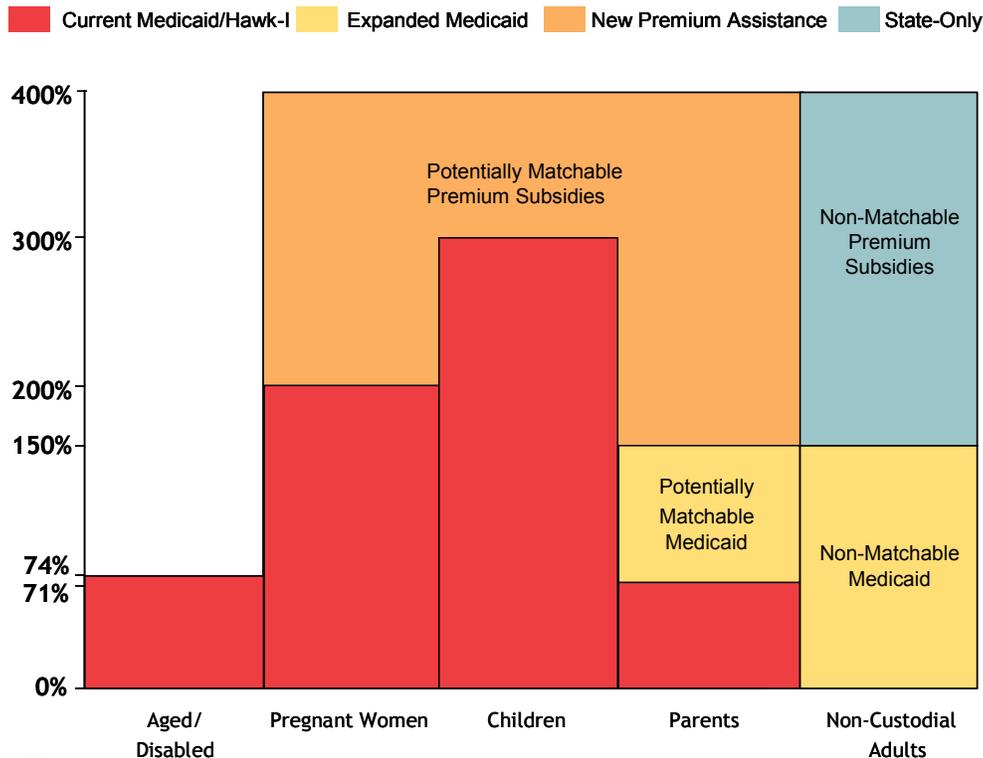
Figure 4
Adults Age 19 and Higher by Income as a Percent of the Federal Poverty Level (FPL) in 2009

Income as a Percent of the Federal poverty Level (FPL)	Total Adults in 2009	Estimated number of Uninsured Adults in 2009
Below 150% FPL	218,877	82,400
150-199% FPL	150,147	41,252
200-299% FPL	194,368	44,957
250-299% FPL	388,588	58,832
300-399% FPL	326,605	34,551
400% FPL & over +	892,035	46,328
Total	2,170,620	308,320

Source: Lewin Group Analysis of the Iowa sub-sample of the Current Population Survey data for 2005 through 2007, which was corrected for an underreporting of Medicaid/hawk-i enrollees using the Health Benefits Simulation Model (HBSM)

In this study, we estimate the impact of providing subsidized coverage for adults through 300 percent of the FPL (*Figure 5*). We first estimate the cost and coverage impacts of expanding eligibility to adults under the Iowa Medicaid program to 150 percent of the FPL. We then estimate the cost of providing subsidies for the purchase of private health insurance to adults between 150 percent and 300 percent of the FPL.

Figure 5
Potential Expansions in Eligibility for Adults in Iowa



We estimate enrollment and costs separately for parents with custodial responsibilities for children and non-custodial adults, which include primarily able-bodied non-elderly adults who do not have children living with them. We present estimates at several income eligibility levels ranging from 71 percent of the FPL to 400 percent of the FPL. These data are designed to provide the state with estimates of the cost of incremental expansions in coverage to various demographic and income eligibility groups.

III. Public Program Eligibility Expansion

To begin the analysis, we modeled the impact of coverage expansions providing access to subsidized health insurance coverage through existing public programs to all people living below 150 percent of the federal poverty level (FPL). For illustrative purposes, we assume that coverage is expanded through the Medicaid program. Coverage under the expansion will be fully subsidized and includes a similar benefit structure to that offered under hawk-i. We provide an analysis for three variations of the Medicaid expansion. *Figure 6* provides the key specifications highlighting the differences between the three variations.

Figure 6
Key Specifications for the Medicaid Expansions Analyzed

1. Medicaid Expansion with Waiting Period	2. Medicaid expansion without a Waiting Period	3. Medicaid expansion with Autoenrollment and a Waiting Period
<ul style="list-style-type: none"> • Expansion to 150% FPL • Hawk-i Benefit package • No Premium Requirement • 6-month waiting period • No autoenrollment 	<ul style="list-style-type: none"> • Expansion to 150% FPL • Hawk-i Benefit package • No Premium Requirement • No waiting period • No autoenrollment 	<ul style="list-style-type: none"> • Expansion to 150% FPL • Hawk-i Benefit package • No Premium Requirement • 6-month waiting period • Autoenrollment

In all of these scenarios, we assume that undocumented immigrants and other non-citizens living in the US for less than 5 years (i.e., the Medicaid waiting period rule) are not eligible for the programs.

For illustrative purposes, we assume that these expansions in coverage are fully implemented in Calendar year (CY) 2009. In fact it could take up to three years for newly eligible people to learn about the program and take the time to enroll. The General Assembly might also decide to phase-in these coverage expansions over a period of years.

A. Medicaid Expansion with Waiting Period

One of the largest issues in expanding health insurance coverage through public programs is the potential loss of Employer-Sponsored Insurance (ESI) through a process known as “crowd-out.” Crowd-out is the process by which people with private employer insurance discontinue that coverage and shift to the new publicly subsidized insurance program. A recent study showed that up to 60 percent of those enrolled in SCHIP otherwise would have had private coverage.²

² Gruber, J., Simon, K., 2008. Crowd-out 10 Years Later: Have Recent Public Insurance Expansions Crowded out Private Health Insurance? *Journal of Health Economics* 27 (2), 201-217.

This loss of private coverage can be reduced by imposing a 6-month waiting period since the applicant was last covered by ESI. The waiting period would not apply to those purchasing no-group insurance in the individual insurance market. In this scenario, we assume that applicants must have been without ESI for at least 6 months before becoming eligible. This is designed to make it impractical for a worker or employer to drop their coverage to enroll by requiring the individual to first go without coverage for 6 months until they can enroll. Research has found that imposing a waiting period limits the effect of crowd-out.³ We assume that the 6-month waiting period is waived for those who lose coverage due to job change.

While waiting periods can reduce crowd-out, they also can result in going without needed care or obtaining services in emergency rooms or other more costly settings. The waiting period could also result in “pent-up” demand for services once eligible resulting in higher program costs. The waiting period rule would not apply to children, who are already eligible through 300 percent of the FPL. However, having separate eligibility rules for individuals within families can affect enrollment levels and can result in higher administrative costs. It is also unclear whether the Centers for Medicare and Medicaid Services (CMS) would approve a waiver to require a waiting period for enrollment.

The available data indicate that about 20 percent of all Iowans between 100 percent and 150 percent of the FPL have employer-sponsored insurance (ESI). Extending eligibility for subsidized coverage to these income levels could result in employers deciding to discontinue ESI once subsidized coverage is available for their employees. However, with a waiting period, employers are not likely to drop coverage in response to the new program. In this scenario, we assume that enrollment is voluntary and that no steps are taken to automatically enroll eligible people based upon tax returns or enrollment in other public programs.

We estimated the number of people who are eligible for the Medicaid expansion based upon the Iowa sub-sample of the CPS data. We estimate the number of eligible people who enroll based upon studies of historical rates of enrollment by income and demographic characteristics. *Figure 7* provides enrollment and cost estimates for the Medicaid expansion with the waiting period requirement assuming it is fully implemented in CY 2009.

Under this scenario, we estimate that about 141,700 Iowans living below 150 percent of the Federal Poverty Level (FPL) would enroll. About half of these new enrollees would be non-custodial adults (71,700 people) living below 71 percent of the FPL, which is the income eligibility level for parents under the Iowa Medicaid program. Enrollment includes 31,600 people between 71 percent and 100 percent of the FPL, and 38,500 people between 100 percent and 150 percent of the FPL. This breakdown illustrates the incremental effects of steadily expanding the income eligibility level.

We also show the impacts for three eligibility groups: children, parents, and non-custodial adults. Note that children and parents are already eligible for Medicaid under 71 percent of the

³ Lo Sasso, A., Buchmueller, T., 2004. “The Effect of the State Children’s Health Insurance Program on Health Insurance Coverage,” *Journal of Health Economics*, 23 (5), 1059-1082.

FPL. For this reason, there is no enrollment for these eligibility categories under 71 percent of the FPL.

Figure 7
Enrollment and Costs Medicaid Expansion Assuming Full Implementation in CY 2009: With a Waiting Period

	Number of Eligible People	Number of People Enrolled	Reduction in Uninsured	Total Costs per Enrollee Month	Total Costs (\$1,000s)	State Costs (\$1,000s)	Federal Costs ^{a/} (\$1,000s)
Below 71 Percent of FPL							
Children	0	0	0	\$0	\$0	\$0	\$0
Parents	0	0	0	\$0	\$0	\$0	\$0
Non-Custodial Adults	124,212	71,653	47,830	\$439	\$377,468	\$377,468	\$0
Total	124,212	71,653	47,830	\$439	\$377,468	\$377,468	\$0
71-100 Percent of FPL							
Children	2,698	2,698	2,416	\$175	\$5,666	\$2,153	\$3,513
Parents	23,717	15,695	14,211	\$391	\$73,641	\$27,984	\$45,657
Non-Custodial Adults	20,660	13,168	10,847	\$439	\$69,369	\$69,369	\$0
Total	47,075	31,561	27,474	\$393	\$148,676	\$99,506	\$49,170
100-150 Percent of FPL							
Children	1,896	1,896	1,528	\$175	\$3,982	\$1,513	\$2,469
Parents	17,132	10,722	9,333	\$391	\$50,308	\$19,117	\$31,191
Non-Custodial Adults	40,213	25,870	20,380	\$439	\$136,283	\$136,283	\$0
Total	59,241	38,488	31,241	\$413	\$190,572	\$156,913	\$33,659
All Below 150 Percent of FPL							
Children	4,594	4,594	3,944	\$175	\$9,647	\$3,666	\$5,981
Parents	40,849	26,417	23,544	\$391	\$123,949	\$47,100	\$76,848
Non-Custodial Adults	185,085	110,691	79,057	\$439	\$583,120	\$583,120	\$0
Total	230,528	141,702	106,545	\$421	\$716,716	\$633,887	\$82,829

a/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

We estimate some increases in children's enrollment under these scenarios even though hawk-i covers children through 300 percent of the FPL. These are children who are eligible but not enrolled in the program who would become covered as a newly eligible parent enrolls in the program.

We use data from the Iowa Department of Human Services (DHS), which is responsible for administering the Iowa Medicaid programs, to estimate per member per month (PMPM) costs of the newly enrolled children and parents. The data consists of FY 2007 spending by various eligibility groups, which we inflate to CY 2009 using the trend in historical growth rates. We also adjust for differences in benefits between the Medicaid and hawk-i programs. This led to a

13 percent downward adjustment to our Medicaid numbers as the hawk-i benefit package is less comprehensive. In order to estimate a PMPM amount for non-custodial adults, we apply actuarial age-rating factors developed for a similar population and apply those to the parents' PMPM amount. Then we calculate a weighted average of the PMPM amounts by age group based upon the age distribution of non-custodial adults.

Total costs are estimated by applying PMPM estimates to the number of people enrolled. We assume that federal matching funds will be available for expansion children and parents. We assume that Iowa will receive no federal matching funds for non-custodial adults as a separate waiver would be required to obtain funding for this group. These waivers are typically required to be budget neutral to the federal government over the course of 5 years, thus leading to cutbacks or increased efficiencies in other elements of the Medicaid program to generate savings that could be redirected to cover non-custodial adults.

The total cost to cover the 141,700 newly enrolled under an expansion to 150 percent of the FPL amounts to \$716.7 million. However, most of the newly enrolled are non-custodial adults who were not eligible for federal matching funds without a waiver, even under prior rules. We have assumed that matching funds would be available only for parents and children. Thus, the state cost would be \$633.9 million. The reduction in the number of uninsured amounts to 106,500 people.⁴

Nearly two-thirds of eligible people (230,500) would enroll under the expansion. However, of 141,700 who enroll, about 106,500 were previously uninsured. The remaining 35,200 would be people who otherwise would have had private insurance, either through an employer plan or a non-group policy. These include some people who qualify under the exception for people changing jobs and some people who would otherwise have purchased insurance as individuals in the non-group market. Thus about 25 percent of enrollment is attributed to a reduction in private insurance coverage. This could be reduced by eliminating the exemption for job change and by applying the waiting period to people with non-group coverage as well.

B. Medicaid Expansion without Waiting Period

In the next Medicaid expansion scenario, we assume that the 6-month waiting period is eliminated. As shown in *Figure 8*, the number of people eligible for the expansion increases to 344,000 people when the waiting period requirement is lifted. Enrollment increases from 141,700 with the waiting period (see above) to about 185,700. All of the enrollment increase is attributed to people who would have had private coverage in the absence of the program. The cost of the program would increase from \$716.7 million with the waiting period to \$927.8 million without the waiting period.

The 107,100 person reduction in the number of uninsured is about the same as under the Medicaid expansion with the waiting period (106,500). Thus about 42 percent of enrollment

⁴ Our cost estimates include the cost of providing the full Medicaid benefit to those now enrolled in IowaCare.

without the waiting period would be people who would have had private coverage in the absence of the program.

In our analysis, we simulate two types of crowd-out. The first includes instances where the worker discontinues their employer coverage so that they can enroll in the public plan. In the second type of crowd-out, employers discontinue their coverage in cases where most of their workers would be able to enroll in the coverage expansion. Insuring employers with a large percentage of low-wage workers are most likely to discontinue their coverage in response to the availability of Medicaid coverage.

Figure 8
Enrollment and Cost Estimates for Medicaid Expansion Without a Waiting Period Assuming Full Implementation in CY 2009^{a/}

	Number of Eligible People	Number of People Enrolled	Reduction in Uninsured ^a	Total Costs per Enrollee Month	Total Costs (\$1,000s)	State Costs (\$1,000s)	Federal Costs ^{b/} (\$1,000s)
Below 71 Percent of FPL							
Children	0	0	0	\$0	\$0	\$0	\$0
Parents	0	0	0	\$0	\$0	\$0	\$0
Non-Custodial Adults	144,256	78,689	47,830	\$439	\$414,534	\$414,534	\$0
Total	144,256	78,689	47,830	\$439	\$414,534	\$414,534	\$0
71-100 Percent of FPL							
Children	4,065	4,065	2,527	\$175	\$8,537	\$3,244	\$5,293
Parents	41,630	21,890	14,211	\$391	\$102,708	\$39,029	\$63,679
Non-Custodial Adults	32,433	16,866	10,847	\$439	\$88,850	\$88,850	\$0
Total	78,128	42,821	27,585	\$389	\$200,094	\$131,123	\$68,972
100-150 Percent of FPL							
Children	4,085	4,085	1,998	\$175	\$8,579	\$3,260	\$5,319
Parents	43,753	20,768	9,333	\$391	\$97,443	\$37,029	\$60,415
Non-Custodial Adults	73,807	39,318	20,380	\$439	\$207,127	\$207,127	\$0
Total	121,645	64,171	31,711	\$407	\$313,149	\$247,416	\$65,734
All Below 150 Percent of FPL							
Children	8,150	8,150	4,525	\$175	\$17,115	\$6,504	\$10,611
Parents	85,383	42,658	23,544	\$391	\$200,151	\$76,058	\$124,094
Non-Custodial Adults	250,496	134,873	79,057	\$439	\$710,511	\$710,511	\$0
Total	344,029	185,681	107,126	\$416	\$927,777	\$793,072	\$134,705

a/ Due to the effect of "crowd-out" there are certain people, who were previously insured through employer sponsored health insurance (ESI) that are now without coverage. This change in coverage is not reflected in this table but is presented below.

b/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Not all of those in firms that drop insurance coverage are expected to enroll in Medicaid or take non-group insurance. For example, there may be some employees losing coverage who have income above 150 percent of the FPL who chose not to purchase a non-group health insurance

plan. In *Figure 9*, we provide our estimate of the number of people losing ESI that remain uninsured. We estimate that about 5,400 people would become uninsured as a result of discontinuations of employer plans if the anti-crowd-out rule is not used. This reduces the net reduction in the number of uninsured under the Medicaid expansion scenario from 107,100 with the waiting period to 101,700 without the waiting period.

Figure 9
Employees Remaining Uninsured after losing Employer-Sponsored Insurance
under the Medicaid Expansion without a Waiting Period in CY 2009

	Number of People losing ESI and Becoming Uninsured	Uninsured under Current Law who Enroll ^{a/}	Net Reduction in Uninsured
Below 71% Percent of FPL	473	47,357	47,357
71% -100% Percent of FPL	1,316	26,269	26,269
100% - 150% Percent of FPL	3,602	28,109	28,109
All Below 150% Percent of FPL	5,391	101,735	101,735

a/ Estimates reflect the expansions in children’s eligibility under HF 2539.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

C. Medicaid Expansion with Automatic Enrollment

In this scenario, we assume that the Medicaid expansion (with waiting period) is accompanied with an automatic enrollment feature. Under this approach, uninsured low-income people enrolling in other income-tested programs would be automatically enrolled in the Medicaid or hawk-i programs. These programs include the Food Stamp, National School Lunch, or the Women, Infant, and Children (WIC). Using the Current Population Survey (CPS) data, we estimate that about 60 percent of all low-income uninsured people are enrolled in one or more of these programs.

We estimate that implementing the coverage expansion (with waiting period) together with automatic enrollment would cover an additional 42,426 uninsured people. As discussed above, expanding Medicaid to 150 percent of the FPL would cover about 106,500 of the uninsured. With automatic enrollment, 149,000 uninsured people would obtain coverage (*Figure 10*).

Figure 10
Enrollment and Cost Estimates for Medicaid Expansion with a
Waiting Period and Automatic Enrollment in CY 2009 ^{a/}

	Number of Eligible People	Number of People Enrolled	Reduction in Uninsured	Total Costs per Enrollee Month	Total Costs (\$1,000s)	State Costs (\$1,000s)	Federal Costs ^{d/} (\$1,000s)
Eligible but not Enrolled at all Income Levels ^{b/}							
Children ^{c/}	19,360	19,360	19,360	\$175	\$40,656	\$15,449	\$25,207
Parents	5,294	5,294	5,294	\$293	\$18,614	\$7,073	\$11,540
Non-Custodial Adults	0	0	0	\$0	\$0	\$0	\$0
Total	24,654	24,654	24,654	\$200	\$59,270	\$22,522	\$36,747
Newly Eligible Groups							
Non-Custodial Adults Living Below 71 Percent of FPL							
Children	0	0	0	\$0	\$0	\$0	\$0
Parents	0	0	0	\$0	\$0	\$0	\$0
Non-Custodial Adults	124,313	79,538	55,720	\$439	\$419,006	\$419,006	\$0
Total	124,313	79,538	55,720	\$439	\$419,006	\$419,006	\$0
71-100 Percent of FPL							
Children	979	979	835	\$175	\$2,056	\$781	\$1,275
Parents	23,717	19,911	18,301	\$391	\$93,422	\$35,501	\$57,922
Non-Custodial Adults	20,661	15,181	12,858	\$439	\$79,974	\$79,974	\$0
Total	45,357	36,071	31,994	\$405	\$175,452	\$116,255	\$59,197
100-150 Percent of FPL							
Children	1,341	1,341	973	\$175	\$2,816	\$1,070	\$1,746
Parents	17,132	12,888	11,500	\$391	\$60,470	\$22,979	\$37,492
Non-Custodial Adults	40,212	29,617	24,130	\$439	\$156,022	\$156,022	\$0
Total	58,685	43,846	36,603	\$417	\$219,309	\$180,071	\$39,238
All Below 150 Percent of FPL							
Children	21,680	21,680	21,168	\$175	\$45,528	\$17,301	\$28,227
Parents	46,143	38,093	35,095	\$391	\$172,507	\$65,553	\$106,954
Non-Custodial Adults	185,186	124,336	92,708	\$439	\$655,002	\$655,002	\$0
Total	253,009	184,109	148,971	\$395	\$873,037	\$737,855	\$135,181

a/ We assume that anyone eligible for Medicaid who is enrolled in Food Stamp, National School Lunch or the Women, Infant, and Children (WIC) Nutrition Programs would be automatically enrolled.

b/ Note that the PMPM amount for eligible but not enrolled parents (\$293) is lower than typical costs for this group (\$391). This is because we estimate that eligible but not enrolled people tend to be healthier than the enrolled population, which can be one of the reasons they do not apply for coverage.

c/ This increase in enrollment for children would occur under HF 2539 if the automatic enrollment initiative is implemented.

d/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

IV. Combining a Medicaid Expansion with Premium Subsidies

Several states have proposed coupling Medicaid expansions with a program that provides subsidies for the purchase of private health insurance. The premium subsidy program is generally targeted to the “near poor” people who can not afford to purchase coverage in today’s market, but who could afford to pay a portion of their health care costs through a premium contribution and reasonable levels of co-payments for services. In this section, we model the effects of adopting such a program in Iowa.

For illustrative purposes we begin the analysis with an example health reform program that we will refer to as the “illustrative health reform”. The program would combine the Medicaid expansion to 150 percent of the FPL with a subsidy for private health insurance for people living between 150 percent of the FPL and 400 percent of the FPL. *Figure 11* shows the key features of the benchmark program.

Figure 11
Key Specifications for the Illustrative Health Reform Plan

Illustrative Health Reform Plan
<p>Medicaid Less than 150% FPL</p> <ul style="list-style-type: none"> • Expansion to 150% FPL • Hawk-i Benefit package • Full subsidies • 6-month waiting period • Voluntary Enrollment (i.e., no auto enrollment) <p>Premium Subsidies Between 150% and 400 % FPL</p> <ul style="list-style-type: none"> • Blue Cross/Blue Shield Benefit Package • HF 2539 Subsidy Structure • 6-month waiting period • Voluntary Enrollment (i.e., no auto enrollment) • No Penalty

Both the Medicaid expansion and the premium subsidy program would include the 6-month waiting period requirement as discussed above to limit “crowd-out.” We assumed that the premium subsidies would range between 2 percent and 6.5 percent of income. This is based upon provisions in HF 2539 that call for development of coverage options ranging from 2 percent per child to 6.5 percent per family. This is similar to the premium subsidies provided in the Massachusetts premium subsidy program, which limits family spending for premiums not to exceed a specified percentage of income ranging between 2.5 percent and 7.0 percent of family income. We assume that the premium subsidies would apply to a benefits package

comparable to the Blue Cross/Blue Shield Standard Option Plan under the Federal Employee Health Benefits Program, which is similar to most private employer health plans.⁵

We assume that all of these expansions are implemented together with the expansions in Medicaid eligibility discussed above for people living below 150 percent of the FPL. For illustrative purposes, we assume that the program is fully implemented in CY 2009. As discussed above, it may take up to three years to reach expected levels of enrollment. In subsequent sections of this report we illustrate the impact of varying individual design features by comparing coverage and costs with the illustrative health reform plan.

A. Impact of Illustrative Coverage Expansion Program

We assume that individuals would see the subsidy as a reduction in the price of insurance. We estimated the number of people taking coverage as a result of the subsidy based upon multivariate studies of how the likelihood of purchasing coverage changes as premiums change. Using this approach, we estimate that the number of uninsured in Iowa would drop by nearly 40 percent from 355,100 people to 219,800 people (*Figure 12*). The reduction in the number of uninsured would be 135,300 people, including 106,500 enrolling in the Medicaid expansion and 28,800 people who take private coverage due to the premium subsidy.

About 44,500 people would receive the premium subsidy. This includes 28,800 uninsured people and 15,700 people who would have had private coverage under current law. These primarily include people purchasing non-group coverage who would now qualify for subsidies under the program.

We estimate that about 4,200 people with employer coverage would receive a premium subsidy. These include people who experience a job change during the year that exempts them from the 6-month waiting period rule for ESI.

⁵ Using data from the Kaiser Family Foundation (KFF) survey of employers for 2006, we estimate that the FEHBP BCBS Standard Option plan is at about the 60th percentile among employer health plans as measured by actuarial value.

Figure 12
Transitions in Coverage under the Illustrative Health Reform Plan (1,000s)

Current Law Primary Coverage Source	Coverage Under Current Law	Primary Coverage Source Under the Policy							
		Subsidized Non-Group	Employer	Non-Group	TRICARE	Medicare (incl. dual eligibles)	Medicaid (excl. dual eligibles)	Retiree	Uninsured
Employer	1,674.4	4.2	1643.1	0.0	0.0	0.0	27.0	0.0	0.0
Non-Group	168.6	11.5	0.0	148.9	0.0	0.0	8.2	0.0	0.0
TRICARE	42.3	0.0	0.0	0.0	42.3	0.0	0.0	0.0	0.0
Medicare (incl. dual eligibles)	395.0	0.0	0.0	0.0	0.0	395.0	0.0	0.0	0.0
Medicaid/hawk-i (excl. dual eligibles) ^{a/}	266.8	0.0	0.0	0.0	0.0	0.0	266.8	0.0	0.0
Retiree	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	0.0
Uninsured	355.1	28.3	0.5	0.0	0.0	0.0	106.5	0.0	219.8
Total	2,939.9	44.1	1,643.1	148.9	42.3	395.0	408.8	37.5	219.8

a/ Estimates include the expansion in hawk-i coverage to 300 percent of the FPL under HF 2539. Estimates do not assume automatic enrollment is implemented because this is not actually required under the bill.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Figure 13 provides more detail on enrollment and cost for the population directly impacted from the two different subsidies; the Medicaid expansion through 150 percent of the FPL and the premium subsidy to 400 percent of the FPL. We estimate enrollment of 186,300 people at a total cost of \$843.2 million. If we assume that federal matching funds are available for children and parents, the state share of the cost would be \$760.4 million. These estimates reflect about \$14.3 million in savings to other state and local government safety-net programs.

Figure 13
Summary of Enrollment and Cost for the Illustrative Health Reform Plan in CY 2009

	Population			Cost (Thousands)		
	Eligible	Enroll	Reduction in Uninsured	Total	State	Federal ^{a/}
Medicaid Expansion (less than 150% FPL)						
Children	4,594	4,594	3,944	\$9,647	\$3,666	\$5,981
Parents	40,849	26,417	23,544	\$123,949	\$47,100	\$76,848
Non-Custodial Adults	185,085	110,691	79,057	\$583,120	\$583,120	\$0
Total	230,528	141,702	106,545	\$716,716	\$633,887	\$82,829
Premium Subsidy (150% - 400% FPL)						
Previously Uninsured						
Use for non group	105,617	28,334	28,334	\$103,668	\$103,668	NA
Use for employer	9,969	476	476	\$221	\$221	NA
Previously Insured						
Currently covered by non group	11,528	11,528	NA	\$23,859	\$23,859	NA
Currently covered by employer	50,233	4,249	NA	\$7,402	\$7,402	NA
Subsidy Administration ^{b/}	NA	NA	NA	\$5,707	\$5,707	NA
Total	222,347	44,587	28,810	\$140,857	\$140,857	NA
Total (Medicaid plus Premium Subsidies)	452,875	186,289	135,355	\$857,573	\$774,744	\$82,829
State and Local Safety-net Programs	--	--	NA	(\$14,315)	(\$14,315)	NA
Total (Medicaid, Subsidies & Safety-net)	452,875	186,289	135,355	\$843,258	\$760,429	\$82,829

a/ Assumes federal matching funds are available for Medicaid children and parents only.

b/ Assumes \$171 annual cost per family for determining eligibility and administering premium subsidies.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

The premium subsidy covers 44,600 people, 28,300 of which were previously uninsured. Figure 14 shows how these people are distributed across income levels. Nearly 40 percent of those who enroll have incomes below 200 percent of the FPL. Our analysis shows that there are about 9,600 people living below 200 percent of the FPL who were previously insured through non-group plans that would now be eligible for the premium subsidy.

Figure 14
Summary of Enrollment and Cost by Income as a percent of the FPL
For the Illustrative Health Reform Plan in CY 2009

	< 200% FPL	200% - 250% FPL	250% - 300% FPL	300% - 350% FPL	350% - 400% FPL	Total 150% - 400% FPL
Enrollment						
Previously Uninsured						
Use for non group	5,345	8,813	7,144	5,252	1,780	28,334
Use for employer	356	120	0	0	0	476
Reduction in Uninsured	5,701	8,933	7,144	5,252	1,780	28,810
Previously Insured						
Currently covered by non group	9,627	510	365	469	557	11,528
Currently covered by employer	2,451	444	776	400	178	4,249
Total	17,779	9,887	8,285	6,121	2,515	44,587
State Cost (thousands) ^{a/}						
Total Private Premium Subsidies	\$51,441	\$40,363	\$30,504	\$17,732	\$818	\$140,857
State and Local Safety Net Programs	(\$558)	(\$819)	(\$1,795)	(\$382)	(\$218)	(\$3,772)
Net Cost to State	\$50,883	\$39,544	\$28,709	\$17,350	\$600	\$137,085

a/ Assumes federal matching funds are available for Medicaid children and parents only.
Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

B. Alternative Premium Subsidy Schedules

In this section we describe the effects of adopting an alternative level of premium subsidies. In the illustrative plan presented above, we used the premium subsidy schedule that is now used in the Massachusetts premium subsidy program, which limits premiums for families to between 2.5 and 7.0 percent of family income, depending on income level. In this scenario, we used an alternative premium subsidy structure where premiums are capped at between 5.0 percent and 13.0 percent of family income.

In *Figure 15* and *Figure 16* we detail the subsidized premium amount schedules used under the two programs for single and family coverage respectively. The amount of the subsidy is actually the difference between the subsidized premium amounts reported in the figures and the actual total premium amounts. These figures also compare premium payments as a percent of family income at various levels under the plans.

Figure 15
Premiums as a Percent of Income for
Single Coverage under the HF 2539 Subsidy Recommendations and a Reduced Subsidy Alternative

Income (as percent of FPL)	Monthly Premium Amounts		Premium as Percent of Income ^{a/}	
	HF 2539	Reduced Subsidy	HF 2539	Reduced Subsidy
Less than \$10,212 (100% FPL)	None	None	0%	0%
\$10,212 - \$15,318 (150% FPL)	None	\$58	0%	0%
\$15,318 - \$20,424 (200% FPL)	\$25	\$116	2.0%	7.8%
\$20,424 - \$25,530 (250% FPL)	\$70	\$174	3.7%	9.1%
\$25,530 - \$30,636 (300% FPL)	\$105	\$232	4.5%	9.9%
\$30,636 - \$35,742 (350% FPL)	\$150	\$290	5.4%	10.5%
\$35,742 - \$40,848 (400% FPL)	\$210	\$290	6.5%	12.5%

a/ Note that percentages are calculated based in midpoint of income range.
Source: Lewin Group illustrative assumptions.

Figure 16
Premiums as a Percent of Income for
Single Coverage under the HF 2539 Subsidy Recommendations and a Reduced Subsidy Alternative

Income (as percent of FPL)	Monthly Premium Amounts		Premium as Percent of Income ^{a/}	
	HF 2539	Reduced Subsidy	HF 2539	Reduced Subsidy
Less than \$17,170 (100% FPL)	None	None	0%	0%
\$ 17,170 - \$25,755 (150% FPL)	None	\$145	0%	0%
\$25,755 - \$34,340 (200% FPL)	\$58	\$240	2.0%	9.6%
\$34,340 - \$42,925 (250% FPL)	\$140	\$434	4.3%	13.5%
\$42,925 - \$51,510 (300% FPL)	\$210	\$579	5.3%	14.7%
\$51,510 - \$60,095 (350% FPL)	\$320	\$724	6.0%	15.6%
\$60,095 - \$68,680 (400% FPL)	\$390	\$724	6.5%	17.5%

a/ Note that percentages are calculated based in midpoint of income range.
Source: Lewin Group illustrative assumptions.

Figure 17 provides our estimate of the enrollment changes caused by applying the different subsidized premium schedules. As discussed above, using the HF 2539 premium subsidies, Medicaid enrollment increases by 141,700 people, of whom 106,500 were previously uninsured. An additional 44,600 people would take coverage under the premium subsidy program, assuming the HF 2539 premium subsidy levels are used. However, under the lower premium subsidy alternative, only about 15,800 people would take the premium subsidy due to the lower level of subsidy under this scenario. Of the 15,800 people receiving subsidies under the alternative subsidy schedule, about 10,400 would be people who under current law would be purchasing non-group coverage.

Figure 17
Changes in Enrollment under Illustrative Plan using the HF 2539 and
the Reduced Premium Subsidy Schedules: CY 2009

	Illustrative Plan with HF 2539 Premium Subsidy Schedule ^{a/}	Illustrative Plan with Reduced Subsidy Schedule
Medicaid Expansion	141,702	141,702
Previously insured	35,157	35,157
Previously Uninsured	106,545	106,545
Number of People who take the Subsidy (< 400% of FPL)	44,587	15,814
Previously uninsured	28,810	4,171
Previously non-group	11,528	10,413
Previously ESI coverage	4,249	1,230
Workers and dependents whose employer drops coverage ^{b/}	NA	NA
Take non-group coverage	NA	NA
Enroll in Medicaid/SCHIP	NA	NA
Go uninsured	NA	NA
Take up ESI coverage	476	21
Currently decline ESI who take it	476	21
Firms who start offering coverage	NA	NA
Reduction in uninsured	135,355	110,716
Newly covered from Medicaid	106,545	106,545
Newly covered people eligible for the subsidy	28,810	4,171
Newly covered above 400% FPL	NA	NA
Become uninsured from employer dropping coverage	NA	NA

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ We assume there are no employers dropping coverage because of the 6-month waiting period.
Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

We estimate that only 4,200 people would take up coverage under the less generous subsidy schedule, compared with 28,800 uninsured people under the HF 2539 subsidy schedule. In both cases, we assume that the decision to take advantage of the subsidy is based upon the change in difference between the premium they would have paid without the subsidy (either a non-group premium or the employee share of the ESI premium) to the subsidized premium amount. The greater the decrease in price, the more likely a person is to use the subsidy to purchase insurance. The number of people previously insured through ESI who take advantage of the subsidy is also significantly greater under the HF 2539-based program (4,200 versus 1,200).

The State is assumed to fully fund the premium subsidies for the population between 150 percent and 400 percent of the FPL, as no federal match would be available for this population

in the absence of a waiver. The premium subsidy cost under the alternative subsidy schedule would be \$36.0 million compared with \$140.9 million using the HF 2539 subsidy schedule, reflecting that the subsidy is less generous and would induce fewer people to take coverage (Figure 18).

Figure 18
Summary of Public Program Costs under Alternative Subsidy Levels in CY 2009
 (thousands)

	Illustrative Plan with HF 2539 Subsidy Schedule ^{a/}	Illustrative Plan with Reduced Subsidy Schedule
Total Program Spending	\$843,258	\$740,031
Spending by Program		
State total	\$760,429	\$657,202
Medicaid Expansion	\$633,887	\$633,887
Premium Subsidies ^{b/}	\$140,857	\$35,950
Other State Programs	(\$14,315)	(\$12,635)
Other	NA	NA
Federal	\$82,829	\$82,829
Medicaid Expansion ^{c/}	\$82,829	\$82,829
Premium Subsidies	NA	NA
Other	NA	NA
Uncompensated Care		
Reduction in Uncompensated Care	(\$65,341)	(\$59,813)

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for determining eligibility and administering premium subsidies.

c/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

The savings to the State through “other state programs,” which includes safety net spending for the uninsured or underinsured, is slightly greater under the HF 2539 subsidy (\$14.3 million versus \$12.6 million) as more of the uninsured are covered with insurance. This savings acts as an offset to State spending for subsidies under the program.

Uncompensated care would be reduced by \$65.3 million under the HF 2539 program and \$59.8 million under the reduced premium subsidy scenario, reflecting the higher level of enrollment under the HF 2539 subsidy levels. The impact of this savings is a direct increase in provider reimbursement, as this care was previously being provided as charity care, as well as a reduction in cost-shifting to private plans.

C. Waiting Period Requirements for Premium Subsidies

The premium subsidy program estimates presented above require people to be uninsured for six-months before becoming eligible for the program, which is designed to discourage people from discontinuing their private coverage to enroll in the premium subsidy program. In this section we model two scenarios where this waiting period is lifted.

In the first scenario, we assume no waiting period requirement. Under this scenario, we expect many income-eligible workers to drop their employer coverage to obtain Medicaid or non-group coverage with the premiums subsidies. Some employers may even discontinue their plans in cases where their workers are eligible for these subsidies. We estimate that 561,400 employees would lose their ESI coverage as employers discontinue their coverage in order for employees to take full advantage of the Medicaid expansions and the premium subsidies (*Figure 19*).

Figure 19
Changes in Sources of Coverage under Scenarios Without a 6-month Waiting Period Requirement in CY 2009

	Illustrative Plan with Waiting Period ^{a/}	Illustrative Plan without Waiting Period	Illustrative Plan without Waiting Period - Subsidies Available for ESI
Medicaid Expansion	141,702	185,681	185,681
Previously insured	35,157	78,555	78,555
Previously Uninsured	106,545	107,126	107,126
Number of People who take the Subsidy (< 400% of FPL)	44,587	349,900	775,900
Previously uninsured	28,810	28,810	28,810
Previously non-group	11,528	76,490	76,490
Previously ESI coverage	4,249	244,600	670,600
Workers and dependents whose employer drops coverage	NA	561,400	78,800
Take non-group coverage	NA	362,581	73,881
Enroll in Medicaid/SCHIP	NA	71,819	19
Go uninsured	NA	127,000	4,900
Take up ESI coverage	476	476	476
Currently decline ESI who take it	476	476	476
Firms who start offering coverage	NA	NA	NA
Reduction in uninsured	135,355	11,000	131,100
Newly covered from Medicaid	106,545	107,126	107,126
Newly covered people eligible for the subsidy	28,810	30,874	28,874
Newly covered above 400% FPL	NA	NA	NA
Become uninsured from employer dropping coverage	NA	(127,000)	(4,900)

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 - 13.
Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Due to the large amount of crowd-out, we estimate that Medicaid/hawk-i enrollment would increase by 257,500 people, and 349,900 people would apply for premium subsidies. However, not all of the workers losing coverage would be eligible for subsidies resulting in about 127,000 people becoming uninsured.

The state's cost for the illustrative reform plan (i.e., the Medicaid expansion and the premium subsidy program) would increase from \$760.4 million with the waiting period (assuming federal matching funds are available for children and parents) to about \$1.7 billion without the waiting period (*Figure 20*). This includes state Medicaid spending of \$988.1 million and premium subsidies of \$796.8 million.

Figure 20
Summary of Public Program Costs under Various Waiting Period Scenarios
(thousands)

	Illustrative Plan with Waiting Period ^{a/}	Illustrative Plan without Waiting Period	Illustrative Plan without Waiting Period - Subsidies Available for ESI
Total Program Cost	\$843,258	\$1,212,964	\$1,397,606
Costs by Program			
State	\$760,429	\$1,664,530	\$1,399,433
Medicaid Expansion	\$633,887	\$988,101	\$793,072
Premium Subsidies ^{b/}	\$140,857	\$796,840	\$640,850
Other State Programs	(\$14,315)	(\$19,665)	(\$15,283)
Tax Gains Due to Wage Effects ^{c/}	NA	(\$100,746)	(\$19,206)
Federal	\$82,829	(\$451,566)	(\$1,827)
Medicaid Expansion ^{d/}	\$82,829	\$229,264	\$134,705
Premium Subsidies	NA	NA	NA
Tax Gains Due to Wage Effects ^{c/}	NA	(\$680,830)	(\$136,532)
Change in Uncompensated Care			
Reduction Uncompensated Care	(\$65,341)	(\$82,345)	(\$67,180)

a/ This scenario corresponds to the "illustrative health reform plan" described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for determining eligibility and administering premium subsidies.

c/ Assumes employers pass on savings due to dropping coverage to employees in the form of higher wages, which become taxable income. Increases in tax revenue counted as offset in federal and state spending.

d/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

These new costs would be partially offset by about \$19.7 million in savings to other safety-net programs and an increase in personal income tax revenues for the state of \$100.7 million. These tax revenues reflect our assumptions that savings to employers resulting from the reduction in employer coverage ultimately would be passed back to workers in the form of higher wage growth, resulting in increases income taxes.

Under this scenario, the potential federal cost of the Medicaid expansion would increase from \$82.8 million with the waiting period requirement to \$229.2 million without the waiting period. However, this increase in federal cost would be more than offset by \$680.8 million in new tax revenues due to the expected increase in wages for workers losing employer coverage. Thus, there would be a reduction in federal costs of about \$451.6 million under this scenario.

In the second scenario we assume that there is no waiting period, but also assume that the premium subsidies can be used for employee ESI contributions for income-eligible workers. This reduces crowd-out because it further reduces the cost of ESI to the worker, making it less costly than no-group coverage with the subsidy.

Under this scenario, Medicaid/hawk-i enrollment would increase by 185,700 people (*Figure 19*). We also estimate that 105,300 people would apply for premium subsidies in the non-group market and 670,600 employees and dependents with ESI coverage would be potentially eligible for the subsidy. There would be a net reduction in the number of uninsured in Iowa of 131,100 people. The state's cost for the Medicaid expansion and the premium subsidies under this scenario would be about \$1.4 billion (*Figure 20*).

D. Immigration Status

As discussed above, undocumented immigrants and lawful immigrants who have not been in the U.S. for 5 years are ineligible for federal matching funds under Medicaid and SCHIP. For purposes of this analysis, we assume that the 5-year waiting period rule for non-citizens applies to the premium subsidy program as well. Waiving this rule for both Medicaid and the premium subsidy program would reduce the number of uninsured by an additional 9,200 people for a total reduction in the number of uninsured of about 144,600 people (*Figure 21*).

Figure 21
Changes in Enrollment due to Eliminating 5-Year Waiting Period for Lawful Immigrants

	Illustrative Plan with 5-Year Waiting Period <small>a/</small>	Illustrative Plan without 5-Year Waiting Period
Medicaid Expansion	141,702	149,851
Previously insured	35,157	35,148
Previously uninsured	106,545	114,703
Number of People who take the Subsidy (< 400 % of FPL)	44,587	45,518
Previously uninsured	28,810	29,868
Previously non-group	11,528	11,807
Previously ESI coverage	4,249	3,843
Workers and dependents whose employer drops coverage	NA	NA
Take non-group coverage	NA	NA
Enroll in Medicaid/SCHIP	NA	NA
Go uninsured	NA	NA
Take up ESI coverage	476	472
Currently decline ESI who take it	476	472
Firms who start offering coverage	NA	NA
Reduction in uninsured	135,355	144,571
Newly covered from Medicaid	106,545	114,703
Newly covered people eligible for the subsidy	28,810	29,868
Newly covered above 400% FPL	NA	NA
Become uninsured from employer dropping coverage	NA	NA

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Total program costs would increase from \$843.3 million with the 5-year waiting period to \$886.2 million without the 5-year waiting period (**Figure 22**). This is an increase in program costs of \$44.4 million, all of which would be paid by the state.

Figure 22
Changes in Public Costs due to Eliminating 5-Year
Waiting Period for Lawful Immigrants: CY 2009
(thousands)

	Illustrative Plan with 5- Year Waiting Period ^{a/}	Illustrative Plan without 5-Year Waiting Period
Total Program Spending	\$843,258	\$886,202
Spending By Program		
State	\$760,429	\$803,373
Medicaid Expansion	\$633,887	\$677,857
Premium Subsidies ^{b/}	\$140,857	\$141,818
Other State Programs	(\$14,315)	(\$16,302)
Other	NA	NA
Federal	\$82,829	\$82,829
Medicaid Expansion ^{c/}	\$82,829	\$82,829
Mandatory Section 125 Plans (tax expenditure)	NA	NA
Other	NA	NA
Change in Uncompensated Care		
Reduction Uncompensated Care	(\$65,341)	(\$69,135)

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for determining eligibility and administering premium subsidies.

c/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

E. Benefits Packages

In this section we compare the enrollment and public cost impacts of the illustrative reform plan under alternative benefits packages. In the illustrative reform scenario, we assumed that the benefits package for the premium subsidy program would use the Blue Cross/Blue Shield FEHBP Standard Option benefits package. In this section, we show how the cost of the program would change if two other benefits packages were used. These include the hawk-i benefit package and a plan similar to the FEHBP plan with an annual benefits limit of \$35,000.

Figure 23 provides the key highlights for the three benefit packages that we have compared. The first benefit package listed is the FEHBP plan discussed above. The plan has a \$250 deductible with co-payments of \$15 for physician services up to the maximum out-of-pocket payment of \$4,000. We have estimated that this benefits package is at roughly the 60th percentile among employer health plans in terms of actuarial value.

Figure 23
Summary of Benefit Packages Used for the Analysis

	Option 1: Typical Plan: BCBS "Standard Option"	Option 2: Healthy and Well Kids in Iowa hawk-i Plan	Option 3: Broad benefits with \$35,000 cap
Physician Services	\$15 copay	No copay	\$10-\$20 copay
Inpatient Hospital	\$250 deductible	No copay	\$100 copay; \$25,000 max
Outpatient Hospital	10% copay \$250 deductible	No copay	\$25-\$50 copay
Emergency	\$250 deductible	\$25 copay if not an emergency	\$50 copay; \$1,000 max
Mental Health	\$15 copay	No copay	Sliding Scale
Prescription Drugs	\$10 generic \$15 brand	No copay	\$5 generic; 50% brand; \$2,500 max
Deductible	\$250	None	None
Out-of-Pocket Maximum	\$4,000	None	\$5,000 or 0%-4% of income by income as a percent of FPL
Annual Benefit Limit	\$1 million	None	\$35,000 (reduces premium by 15%)

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

The second option provides a more comprehensive package based on the benefits available under hawk-i in Iowa. This package also covers vision and dental care and does not have a deductible or require co-payments for services, except for emergency room services that are not emergencies. This benefit package is adapted for use by both children and adults.

In addition, we estimate enrollment and costs under a benefit package designed to reduce the cost of coverage. Option 3 provides relatively low co-payments, but includes a benefits maximum of \$35,000. This package is designed to provide good "up-front" coverage to encourage the use of primary care while limiting exposure for high-cost cases. This plan also includes caps for specific services, such as a \$2,500 maximum benefit for prescription drugs. These service caps work to further reduce the costliness of the plan. In the alternative, the state could use the "basic benefits" defined in the now repealed Section 514H, which was designed to create a limited benefits package for small employers and individuals who have been without coverage for 12 months.

Figure 24 shows the changes in enrollment under these variations in the benefit package under the illustrative health reform plan. Because these benefits changes apply to only the premium subsidy program, enrollment and costs under the Medicaid expansion remains the same across the alternatives. Only premium subsidies for people between 150 percent and 400 percent of the FPL are affected.

Figure 24
Summary of Changes in Coverage under Various Benefit Packages

	Illustrative Plan with FEHBP Blue Cross/Blue Shield ^{a/}	Illustrative Plan with Hawk-i Benefits Package	Illustrative Plan with \$35,000 Benefit Limit
Medicaid Expansion	141,702	141,702	141,702
Previously insured	35,157	35,157	35,157
Previously Uninsured	106,545	106,545	106,545
Number of People who take the Subsidy (<400% of FPL)	44,587	44,587	48,032
Previously uninsured	28,810	26,998	32,252
Previously non-group	11,528	11,528	11,528
Previously ESI coverage	4,249	4,249	4,252
Workers and dependents whose employer drops coverage	NA	NA	NA
Take non-group coverage	NA	NA	NA
Enroll in Medicaid/SCHIP	NA	NA	NA
Go uninsured	NA	NA	NA
Take up ESI coverage	476	476	476
Currently decline ESI who take it	476	476	476
Firms who start offering coverage	NA	NA	NA
Reduction in uninsured	135,355	135,355	138,797
Newly covered from Medicaid	106,545	106,545	106,545
Newly covered people eligible for the subsidy	28,810	26,998	32,252
Newly covered above 400% FPL	NA	NA	NA
Become uninsured from employer dropping coverage	NA	NA	NA

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Our analysis indicates that there is little difference in enrollment between the FEHBP benefits scenario and the hawk-i benefits package. The reason for this is that the cost of coverage to the individual is capped at the same percentage of income under all three scenarios. Thus the premium cost net of subsidies tends to be the same for most eligible families under these scenarios, although the amount of subsidy required to cap people’s premiums will vary with the cost of the benefits package.

The number of people choosing to take the subsidy for the plan capped at \$35,000 is higher than under either of the more comprehensive plans (48,000 versus 44,600). Because of the limited benefits, the monthly premiums for this plan are significantly lower (\$263) than the FEHBP/BCBS plan (\$408) and the hawk-i (\$454) plan (*Figure 25*). Consequently, we estimate higher enrollment under the benefits package with the \$35,000 coverage limit.

Figure 25
Average Monthly Premium under Each Benefit Package for New Enrollees in CY 2009

	Average Monthly Premium
Blue Cross/Blue Shield	\$408
Hawk-i	\$454
\$35k maximum benefit limit	\$263

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

The cost of the premium subsidies is greatest with the hawk-i benefit packages, as this is the most comprehensive of the three packages (*Figure 26*). There is a significant decrease in the amount of premium subsidies required under the capped plan (\$84.3 million) in comparison to the FEHBP/BCBS (\$140.9 million) and hawk-i (\$155.4 million) alternatives.

Figure 26
Summary of Public Program Costs under Selected Benefit Packages in CY 2009
(thousands)

	Illustrative Plan with FEHBP Benefits Package <i>a/</i>	Illustrative Plan with Hawk-i Benefits Package	Illustrative Plan with \$35,000 Benefit Limit Package
Total Program Cost	\$843,258	\$857,589	\$788,018
Costs by Program			
State	\$759,020	\$774,760	\$705,189
Medicaid Expansion	\$633,887	\$633,887	\$633,887
Premium Subsidies <i>b/</i>	\$140,857	\$155,378	\$84,349
Other State Programs	(\$14,315)	(\$14,505)	(\$13,047)
Other			
Federal	\$82,829	\$82,829	\$82,829
Medicaid Expansion <i>c/</i>	\$82,829	\$82,829	\$82,829
Premium Subsidies	NA	NA	NA
Other	NA	NA	NA
Change in Uncompensated Care			
Reduction Uncompensated Care	(\$65,341)	(\$66,119)	(\$35,790)

a/ This scenario corresponds to the "illustrative health reform plan" described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for determining eligibility and administering premium subsidies.

c/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

V. Mandatory versus Voluntary Enrollment

In this section we compare eligibility expansions with and without a mandate for all Iowans to have health insurance coverage. All of the variations on the illustrative health reform plan discussed above assumed that enrollment is voluntary. This means that income-eligible people are provided subsidies for insurance only if the individual applies and agrees to pay for their share of the premium. Our analysis indicates that the illustrative plan would cover about 38 percent of the uninsured (includes Medicaid expansion and premium subsidy program). Higher levels of coverage could be attained if these programs were implemented as a coverage mandate.

We estimated the cost of the illustrative health reform plan under two variations on the mandate. Under the first version, all Iowans are required to show proof of coverage when they file their tax returns or pay a penalty equal to half of what insurance would have cost. We also assume automatic enrollment of uninsured people in Medicaid through other income-tested programs as discussed above.

In the second scenario, we add an automatic enrollment process through income tax filings. People are automatically enrolled in a health plan and are billed for premiums if no proof of insurance is provided on their tax returns. This would be in addition to automatic enrollment through Food Stamps, the National School Lunch Program and WIC for the Medicaid program. Under both scenarios, we assume that people are exempt from the mandate if the premium for the coverage available to them exceeds 10 percent of their income (before tax).

A. Issues with Automatic Enrollment

Several issues have been raised concerning the feasibility of implementing an automatic enrollment model. The auto-enrollment process would require the state to automatically enroll children into Medicaid or SCHIP because of their participation in another program (e.g. Food Assistance, etc.). However, since federal rules now require that Medicaid applicants provide very specific documentation to verify their identity and citizenship, before they can be enrolled, the state cannot assume eligibility based only on income.

An alternative is to auto-enroll people based upon their state income tax records. The rules regarding Medicaid and SCHIP eligibility and income tax are filed are not consistent. For example, certain kinds of income are not taxable but are counted as income for public assistance programs (e.g. child support). Also, the definition of a "household" for tax purposes is not consistent with who must be counted in the household for Medicaid or SCHIP eligibility purposes. For example, spouses can file income taxes separately and children who don't live in the household can be claimed as dependents if more than 50 percent of the cost of their care is being claimed by the tax filer.

There are other issues with enrolling families into programs that they did not specifically apply for. In order to participate in Medicaid and SCHIP for example, the applicant must agree to certain requirements. These may include reporting changes within certain time frames, cooperating with child support recovery, assignment of rights, etc. If a person is automatically enrolled into Medicaid or SCHIP, we question how these requirements (some are federally mandated) can be enforced.

There are also risks to accepting data from other programs or agencies to automatically enroll a child in Medicaid or SCHIP as it relates to federal audit or Payment Error Rate Measurement (PERM) reviews. For example, if an agency provides incorrect information, Medicaid or hawk-i would be responsible for enrolling someone who doesn't meet eligibility requirements.

One approach would be to obtain a CMS waiver to provide presumptive eligibility to people identified through these systems. Individuals would be required to file a standard application with subsequent income verification by the Medicaid or hawk-I agencies. This would permit the state to implement all of the steps in enrollment. However, this would reduce the impact on coverage in cases where people fail to follow-up with an application. Also, people who are unwilling to pay a premium, if applicable, would be dropped from the program.

B. Coverage Effects

Adding a penalty and automatic enrollment for Medicaid as under the first mandate scenario increases the number of uninsured that take coverage from 135,400 (38 percent) under the illustrative plan, to 212,000 people (59 percent) (*Figure 27*). We estimate that approximately 21,600 of the newly insured are people living above 400 percent of the FPL and would buy insurance to avoid the penalty. The penalty also increases the number of people who elect to take advantage of the subsidized premium by 28 percent, from 44,600 without the mandate to 57,300 with the mandate. We also estimate that an additional 2,700 people who would decline ESI under current law would take that coverage to avoid a penalty.

Under the second mandate scenario, automatically enrolling people through tax returns increases the number of uninsured who take coverage to 297,700 (83 percent). This estimate reflects the effect of providing an opt-out for people facing premiums in excess of 10 percent of income. Under this scenario, about 14,000 uninsured people who under current law decline the coverage offered them through work would accept the coverage in response to the mandate.

Figure 27
Changes in Coverage under Voluntary Enrollment, Mandatory Enrollment with a Penalty, and
Mandatory Enrollment with Automatic Enrollment

	Illustrative Plan with Voluntary Plan ^{a/}	Illustrative Plan with Mandate with a Penalty ^{b/}	Illustrative Plan with a Mandate, a Penalty and Automatic Enrollment through Tax Filings ^{b/}
Medicaid Expansion	141,702	184,109	193,194
Previously insured	35,157	35,138	35,882
Previously uninsured	106,545	148,971	157,372
Number of People who take the Subsidy (< 400 % of FPL)	44,587	57,285	104,863
Previously uninsured	28,810	41,508	89,086
Previously non-group	11,528	11,528	11,528
Previously ESI coverage	4,249	4,249	4,249
Workers and dependents whose employer drops coverage	NA	NA	NA
Take non-group coverage	NA	NA	NA
Enroll in Medicaid/SCHIP	NA	NA	NA
Go uninsured	NA	NA	NA
Take up ESI coverage	476	2,739	14,006
Currently decline ESI who take it	476	2,739	12,223
Firms who start offering coverage	NA	NA	1,783
Reduction in uninsured	135,355	212,031	297,713
Newly covered from Medicaid	106,545	148,971	157,372
Newly covered people eligible for the subsidy	28,810	41,508	89,086
Newly covered above 400% FPL	NA	21,552	51,255
Become uninsured from employer dropping coverage	NA	NA	NA

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ The Penalty equals 50 percent of the premium, given the subsidies available. People can opt-out if their share of the premium is estimated to be greater than 10 percent of their income.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Under both of the Mandate scenarios, Medicaid program costs would be roughly \$100 million higher than under the voluntary enrollment scenario due to the larger number of people enrolled under the mandate (*Figure 28*). However, there are substantial differences in enrollment and costs under the two mandate scenarios.

Under the first mandate scenario (i.e., mandate with a penalty) the cost of the premium subsidies is actually smaller than under the voluntary scenario. Premium subsidy costs would be \$124.1 million under the first mandate scenario compared with \$140.8 million under the voluntary enrollment scenario. This is because premiums for the insurance required under this

scenario (i.e., the FEHBP plan) declines from \$408 PMPM under the voluntary enrollment scenario to \$286 PMPM under the mandate. This is because the people who take coverage only because of the mandate tend to be younger and healthier than those who enroll voluntarily.⁶ Total program costs under this scenario (\$778.3 million) are also lower than under the voluntary scenario (\$843.3 million) due to penalty revenues of about \$195.7 million for those who chose to remain uninsured.

Adding an automatic enrollment mechanism for uninsured people detected through the tax system increases coverage as well as increasing program enrollment and costs. Total program costs would increase to \$996.4 million in part because of the reduction in penalty revenues resulting from automatic enrollment.

Figure 28
Comparison of Public Costs under Voluntary versus Mandatory Enrollment CY 2009
 (thousands)

	Illustrative Plan with Voluntary	Illustrative Plan with Mandate with a Penalty	Illustrative Plan with Mandate & Automatic Enrollment through Tax Filings
Total Program Costs	\$843,258	\$778,295	\$996,383
Spending by Program			
State	\$760,429	\$643,114	\$847,876
Medicaid Expansion	\$633,887	\$737,885	\$746,618
Premium Subsidies ^{a/}	\$140,857	\$122,822	\$166,110
Other State Programs	(\$14,315)	(\$21,924)	(\$25,720)
Other (Penalty)	NA	(\$195,669)	(\$39,132)
Federal	\$82,829	\$135,181	\$148,507
Medicaid Expansion ^{c/}	\$82,829	\$135,181	\$148,507
Premium Subsidies	NA	NA	NA
Other	NA	NA	NA
Change in Uncompensated Care			
Reduction Uncompensated Care	(\$65,341)	(\$82,880)	(\$93,145)

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for administering eligibility and premium subsidies.

c/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

⁶ These estimates are developed separately by age group to reflect that premiums in the non-group market typically vary with age as well as health status.

VI. Requiring Employers to Offer Section 125 Plans

Section 125 of the internal revenue code permits employers to establish premium-only cafeteria plans that permit workers to pay their premiums for health insurance in pre-tax dollars, thus reducing the after-tax cost of insurance to the worker. The ability to pay for health insurance on a pre-tax basis provides a significant cost savings, making coverage more affordable and encouraging individuals to enroll in health insurance. In this section we analyze the impact on costs and coverage of requiring all employers with 10 or more workers to offer Section 125 plans. Although employers would not be required to contribute to the cost of coverage, this would permit workers to pay premiums for private insurance on a pre-tax basis.

Making Section 125 plans available to all workers in the private market increases the number of uninsured who take coverage from 135,300 people without the Section 125 requirement to 152,800 people with the requirement (*Figure 29*). This includes a small number of employees who decline ESI under current law.

Figure 29
Changes in Enrollment due to Requiring All Employers with 10 or More Workers to Offer Section 125 Plans

	Illustrative Plan without Mandatory Section 125 Plans	Illustrative Plan with Mandatory Section 125 Plans
Medicaid Expansion	141,702	141,702
Previously insured	35,157	35,157
Previously uninsured	106,545	106,545
Number of People who take the Subsidy (< 400 % of FPL)	44,587	51,023
Previously uninsured	28,810	35,246
Previously non-group	11,528	11,528
Previously ESI coverage	4,249	4,249
Workers and dependents whose employer drops coverage	NA	NA
Take non-group coverage	NA	NA
Enroll in Medicaid/SCHIP	NA	NA
Go uninsured	NA	NA
Take up ESI coverage	476	877
Currently decline ESI who take it	476	877
Firms who start offering coverage	NA	NA
Reduction in uninsured	135,355	152,751
Newly covered from Medicaid	106,545	106,545
Newly covered people eligible for the subsidy	28,810	35,246
Newly covered above 400% FPL	NA	10,960
Become uninsured from employer dropping coverage	NA	NA

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

The cost of premium subsidies under the program would increase from \$140.8 million without the Section 125 requirement to \$153.8 million with the Section 125 requirement (*Figure 30*). This reflects that combining the tax exclusion with the premium subsidies would cause more people to take coverage by effectively reducing the cost of the premium. The Section 125 tax exclusion for worker premiums would result in reduced tax payments by Iowa households resulting in lower federal tax revenues. Federal tax revenues would be reduced by about \$303,600. Because Iowa computes personal income taxes using federal adjusted gross income (AGI), which excludes premiums paid with pre-tax dollars, there would also be a reduction in Iowa state income tax revenues of \$78.6 million.

Figure 30
Changes in Public Costs due to Requiring All Employers with 10 or More
Workers to Offer Section 125 Plans in CY 2009
(thousands)

	Illustrative Plan without Mandatory Section 125 Plans ^{a/}	Illustrative Plan with Mandatory Section 125 Plans
Total Program Costs	\$843,258	1,237,127
Spending by Program		
State	\$760,429	\$850,649
Medicaid Expansion	\$633,887	\$633,887
Premium Subsidies ^{b/}	\$140,857	\$153,787
Other State Programs	(\$14,315)	(\$15,584)
State Income tax loss (tax Expenditure)	NA	\$78,559
Federal	\$82,829	\$386,478
Medicaid Expansion ^{c/}	\$82,829	\$82,829
Mandatory Section 125 Plans (tax expenditure)	NA	\$303,649
Other	NA	NA
Change in Uncompensated Care		
Reduction Uncompensated Care	(\$65,341)	(\$67,230)

a/ This scenario corresponds to the “illustrative health reform plan” described above in Figures 11 through 13.

b/ Includes \$171 annual cost per family for determining eligibility and administering premium subsidies.

c/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

VII. Federal Matching Funds

Prior to August 2007, states were free to increase their effective income eligibility levels to higher multiples of the FPL and receive federal matching funds for newly eligible children and parents. All that was required was for the state to submit a plan amendment. CMS also approved the Massachusetts waiver last year, which permits the state to enroll Medicaid eligible people in private insurance by providing premium subsidies.

CMS has now determined that they will not approve federal matching funds for any newly eligible groups. It is unclear whether this policy will extend beyond the current administration. In general, we have assumed that CMS will not approve such funds in the alternatives analyzed in this report. However, we have presented these estimates with and without the assumption that federal funds are available for these expansions.

Even prior to August 2007, a waiver was required to obtain federal matching funds for coverage provided to non-custodial adults. These waivers require that the waiver be budget neutral to the federal government over 5 years. This typically requires cutting back on other elements of the Medicaid program to generate savings that could be redirected to cover non-custodial adults.

However, federal matching funds are available for eligible but not enrolled people who can become enrolled through outreach or automatic enrollment procedures.

In *Figure 31* we present cost estimates for the illustrative health reform plan scenario described above under four federal matching funds scenarios. These include:

- Scenario # 1: In the first scenario, we assume that federal matching funds are available for only children and parents under Medicaid;
- Scenario # 2: In this scenario, we assume that federal matching funds are available for all individuals covered under Medicaid including non-custodial adults under a federal waiver;
- Scenario # 3: Assumes that federal matching funds are provided for parents and children under the premium subsidy program under a federal waiver (waiver required for implementing expansion through premium subsidy program as in Massachusetts); and
- Scenario # 4: Assumes federal matching funds are available for all Medicaid expansions and the premium subsidy programs under federal waivers.

Figure 31
Changes in Public Costs due to Extending Federal
Matching Funds for Newly Eligible Groups
(thousands)

	Total	State	Federal
Scenario # 1: Federal Match for Medicaid Children and Parents only			
Medicaid Expansion < 150% of the FPL			
Parents and Children	\$133,596	\$50,767	\$82,829
Non-Custodial Adults	\$583,120	\$583,120	\$0
Subsidy for 150% - 400% FPL			
Parents and Children	\$65,788	\$65,788	\$0
Non-Custodial Adults	\$69,362	\$69,362	\$0
Administration of Subsidies	\$5,707	\$5,707	\$0
Other State Programs	(\$14,315)	(\$14,315)	\$0
Total	\$843,258	\$760,429	\$82,829
Scenario # 2: Federal Match for all Medicaid Including Non-Custodial Adults			
Medicaid Expansion < %150 FPL			
Parents and Children	\$133,596	\$50,767	\$82,829
Non-Custodial Adults	\$583,120	\$221,586	\$361,534
Subsidy for 150% - 400% FPL			
Parents and Children	\$65,788	\$65,788	\$0
Non-Custodial Adults	\$69,362	\$69,362	\$0
Administration of Subsidies	\$5,707	\$5,707	\$0
Other State Programs	(\$14,315)	(\$14,315)	\$0
Total	\$843,258	\$398,895	\$444,363
Scenario # 3: Federal Match for all Medicaid and Premium subsidies for Children and Parents			
Medicaid Expansion < %150 FPL			
Parents and Children	\$133,596	\$50,767	\$82,829
Non-Custodial Adults	\$583,120	\$221,586	\$361,534
Subsidy for 150% - 400% FPL			
Parents and Children	\$65,788	\$25,433	\$40,355
Non-Custodial Adults	\$69,362	\$69,362	\$0
Administration of Subsidies	\$5,707	\$3,988	\$1,719
Other State Programs	(\$14,315)	(\$14,315)	\$0
Total	\$843,258	\$356,821	\$486,437
Scenario # 4: Federal Match for All Expansions			
Medicaid Expansion < %150 FPL			
Parents and Children	\$133,596	\$50,767	\$82,829
Non-Custodial Adults	\$583,120	\$221,586	\$361,534
Subsidy for 150% - 400% FPL			
Parents and Children	\$65,788	\$25,433	\$40,355
Non-Custodial Adults	\$69,362	\$26,819	\$42,543
Administration of Subsidies	\$5,707	\$2,169	\$3,538
Other State Programs	(\$14,315)	(\$14,315)	\$0
Total	\$843,258	\$312,459	\$530,799

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

VIII. Summary of Results

In this section we provide a summary of the coverage and public cost impacts of the variations on the illustrative health reform plan presented in this report. The major features of the illustrative plan scenario are summarized again in *Figure 32*.⁷

Figure 32
Key Specifications for the Illustrative Health Reform Plan

HF 2539-based Subsidized Premium Schedule
<p>Medicaid Less than 150% FPL</p> <ul style="list-style-type: none"> • Expansion to 150% FPL • Hawk-i Benefit package • Full subsidies • 6-month waiting period • No automatic enrollment <p>Premium Subsidies Between 150% and 400 % FPL</p> <ul style="list-style-type: none"> • Blue Cross/Blue Shield Benefit Package • HF 2539 Subsidy Structure • 6-month waiting period • Voluntary Enrollment • No Penalty

The first column of *Figure 33* shows the effects of expanding coverage through a combination of a Medicaid expansions and a premium subsidy program in the illustrative plan. The next columns in *Figure 33* show the change in enrollment and costs as key design features are varied.

Implementing the program as a mandate with automatic enrollment results in the highest cost to the State; whereas the mandate with just the penalty (and no autoenrollment for private coverage) is the least costly scenario. These are also the two plans that result in the greatest reduction in the number of uninsured.

If we exclude the mandatory enrollment scenarios, Section 125 plan results in the largest decrease in the number of uninsured, with relatively moderate State costs. The Section 125 scenario does result in significantly higher federal funding, due to lost tax revenues, in comparison to the other scenarios.

⁷ This is the same plan described above in *Figure 11*.

Figure 33
Change in Coverage and Cost under Variations of the Illustrative Coverage Expansion Scenario:
CY 2009

Enrollment and Costs	Illustrative Health Reform Plan ^{a/}	Impact of Changing Selected Features of the Illustrative Coverage Expansion Scenario					
		Reduced Premium Subsidy	Use the Hawk-i Benefits Package	Include a \$35,000 Cap on Benefits	Mandatory Coverage with Penalty	Mandatory Coverage with Automatic Enrollment	Mandatory Section 125 plan
Changes in Enrollment from Illustrative Coverage Expansion Scenario							
Medicaid Expansion	141,702	0	0	0	42,407	51,492	0
Number of People who take the Subsidy	44,587	(28,773)	0	3,445	12,698	60,276	6,436
Workers and Dependents whose employer drops coverage	NA	NA	NA	NA	NA	NA	NA
Workers who take up Coverage	476	(455)	0	0	2,263	13,530	401
Reduction in Uninsured	135,355	(24,639)	0	3,442	76,676	162,358	17,396
Change in Program Costs from Illustrative Coverage Expansion Scenario (thousands)							
State	\$760,429	(\$101,135)	\$15,660	(\$52,811)	(\$125,568)	\$74,897	\$90,187
Federal ^{b/}	\$82,829	\$0	\$0	\$0	\$52,352	\$65,678	\$303,649
Total Cost	\$843,258	(\$101,135)	\$15,660	(\$52,811)	(\$73,216)	\$140,575	\$393,836
Change In Uncompensated Care from Illustrative Coverage Expansion Scenario (thousands)							
Reduction in Uncompensated Care	(\$65,343)	\$5,528	(\$778)	\$29,551	(\$17,539)	(\$27,804)	(\$1,889)

a/ The illustrative plan matches the scenario presented in **Figure 8** above. It includes an expansion in Medicaid to 150 percent of the FPL with premium subsidies for people between 150 percent and 400 percent of the FPL. This scenario is voluntary (i.e., no coverage mandate) and includes a 6-month waiting period for both the Medicaid expansion and the premium subsidy proposal. The benefits package is based upon the FEHBP BCBS Standard Option Plan, and premium subsidies are based upon those in the HF 2539 legislation.

b/ Assumes federal matching funds are available for Medicaid children and parents only.

Source: Lewin Group estimates using the Health Benefits simulation model (HBSM).

Appendix A: Estimates of Health Spending in Iowa for Calendar Year 2009

A. Introduction

The Lewin Group developed estimates of coverage and health expenditures in Iowa for calendar year (CY) 2009 under current-law policy. This includes current-law spending by state and local governments, employers, households and the federal government. The objective of these estimates is to develop a matrix of Iowa health spending for CY 2009 by service and source of funding that is similar in content to the National Health Expenditure (NHE) accounts developed by the Centers for Medicare & Medicaid Services.⁸

Unfortunately, no single entity maintains a detailed accounting of all health expenditures in the state. A major reason for this is that our current multi-payer system does not require the kind of centralized systems for the payment of health care services that would be conducive to collecting and evaluating overall health expenditures. For example, payment systems for government health benefits programs are completely separate from private payment systems. Also, private employer health plans usually maintain separate health data systems that are not conducive to tracking health expenditures for individual geographic areas such as states. For example, some Iowa workers are employed in firms where the corporation and its health plan are headquartered out-of-state. Similarly, some out-of-state workers are covered under plans based in Iowa. Consequently, it is difficult to obtain data on health plan expenditures under public and private health plans for any given state.

Our approach is to piece together estimates of health spending by source of payment and type of service from the data that are available. One source is the Centers for Medicare & Medicaid Services (CMS), which has developed estimates of total health spending, as well as Medicare and Medicaid spending by type of service for each state between 1980 and 2004.⁹ We also use information from Iowa state government documents and reports from various State agencies to compile expenditures for state and local programs such as Medicaid, the hawk-i program, and the Health Insurance Plan of Iowa (HIPIowa).

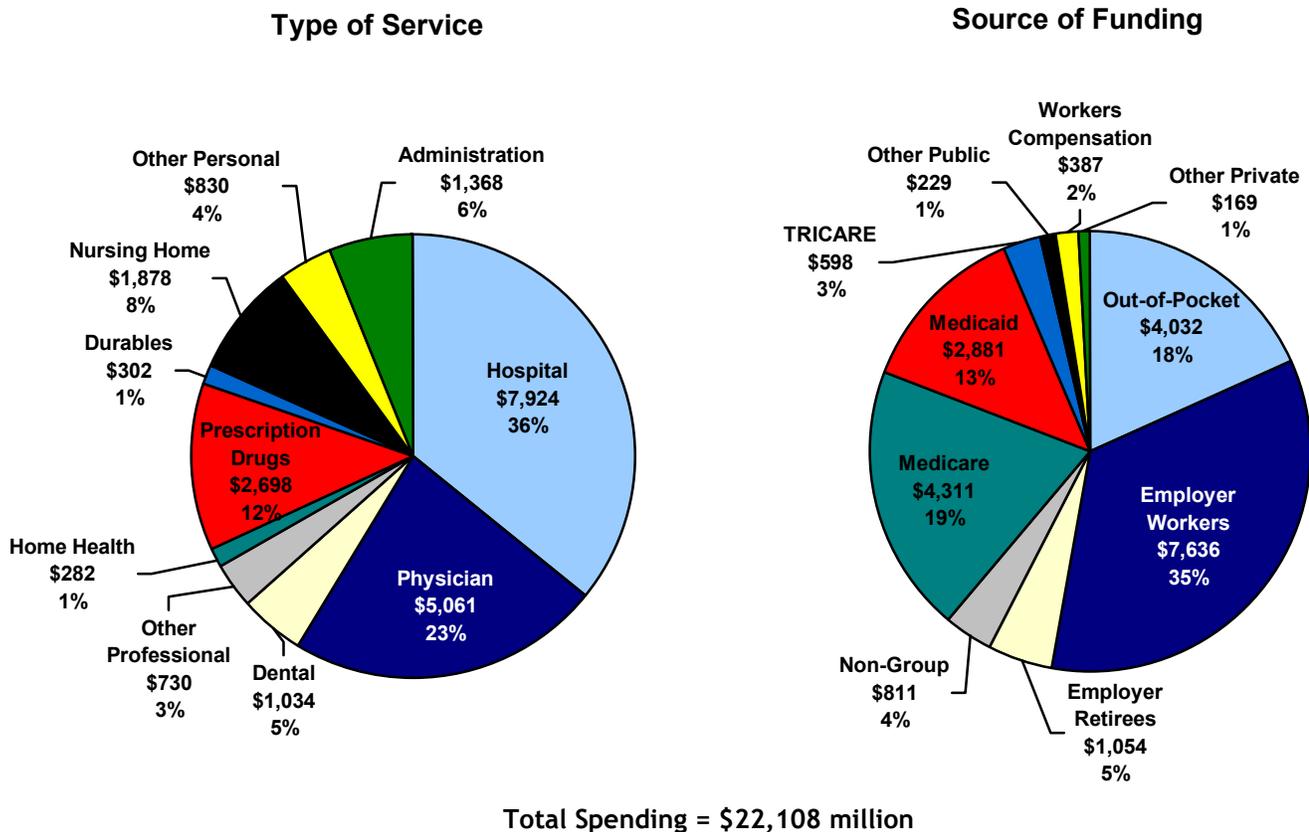
While data on spending for government programs in the state are available, comparable information on health spending under specific types of private insurance and household out-of-pocket spending is comparatively sparse. Data on employer health spending in Iowa is available from the employer component of the Medical Expenditure Panel Survey (MEPS) data, administered by the Agency for HealthCare Research and Quality (AHRQ). Additional information on private spending for fully-insured employer plans and non-group insurance is available from the Iowa Office of the Insurance Commissioner. The MEPS also includes a

⁸ Aaron Catlin, Cathy Cowan, Micah Hartman, Stephen Heffler, and the National Health Accounts Team. 2008. "National Health Spending In 2006: A Recent Change for Prescription Drugs." *Health Affairs*, 27(1): 14-29.

⁹ Centers for Medicare & Medicaid Services. "Health Expenditures by State" <Available as of March 21, 2008 at: http://www.cms.hhs.gov/NationalHealthExpendData/05_NationalHealthAccountsStateHealthAccounts.asp#TopOfPage.>

survey of households, which provides information on the sources and uses of funds under private insurance and the levels of household out-of-pocket and premium expenditures, which we use to supplement the Iowa specific health spending data. Information from all of these sources were incorporated into our analysis to develop a detailed accounting of health spending in Iowa.

Figure 1
CY 2009 Estimated Spending in Iowa by
Type of Service and Source of Funding ^{a/}
(in millions)



Note that percentages may not add to 100 percent because of rounding.
 Source: Lewin Group Estimates.

This process required converting some of the health spending data from these various sources to be comparable to the total health spending data reported by CMS for Iowa. This included: projecting CMS health spending estimates to CY 2009; eliminating all double counting of expenditures for public programs; and adjusting the government program data to exclude non-health items that are included in national health spending estimates. We also need to convert some spending data from government fiscal year dollars to calendar-year dollars. *Figure 1* presents our estimates of spending by type of service and source of coverage in Iowa. Total health spending in Iowa for CY 2009 is \$22.1 billion, which includes administration.

The following sections describe the data and methods used to estimate health spending in Iowa by type of service and source of payment.

B. Health Spending by Type of Service

We estimated health spending for Iowa by type of service for CY 2009 based upon historical data on actual spending in Iowa. For example, the Office of the Actuary (OACT) of the Centers for Medicare & Medicaid Services (CMS) conducts an extensive analysis of health spending by type of service that is designed to provide reliable estimates of spending for each individual state. These data are based upon hospital financial reports for each hospital in Iowa. Data on income for physicians and other health professionals is based upon the Iowa sub-sample of surveys of businesses conducted by the Bureau of Labor Statistics (BLS).

1. Historical Spending in Iowa by Type of Service

We first estimate a control total for CY 2009 health spending in the state of Iowa. In order to do this, we start with the CMS state health estimates for Iowa in CY 2004, which is their most recent year available. These estimates are available by type of service and are displayed along with national estimates in *Figure 2*. Total health spending in Iowa was approximately \$15.9 billion in 2004. This includes spending by all public and private payers in the state including individuals' out-of-pocket payments. It also includes spending for hospitals, physicians, other professionals, dentists, prescription drugs and long-term care. It excludes insurer and program administration, research and construction, and public health spending.¹⁰

¹⁰ Note that research and construction and public health spending are not included in any spending figures in this report.

Figure 2
Historical Spending in Iowa and the
United States by Type of Service: CY 2000 and CY 2004 (in millions) ^{a/}

Type of Service	Iowa			United States		
	CY 2000	CY 2004	Average Annual Growth 2000-2004	CY 2000	CY 2004	Average Annual Growth 2000-2004
Hospital	\$4,808	\$6,179	6.5%	\$417,049	\$566,886	8.0%
Physician	\$2,711	\$3,719	8.2%	\$288,609	\$393,713	8.1%
Dental	\$529	\$735	8.6%	\$61,975	\$81,476	7.1%
Other Professional ^{b/}	\$412	\$557	7.8%	\$39,072	\$52,636	7.7%
Home Health	\$328	\$310	-1.4%	\$30,514	\$42,710	8.8%
Prescription Drugs	\$1,449	\$2,021	8.7%	\$150,969	\$222,412	10.2%
Medical Durables	\$214	\$261	5.1%	\$19,330	\$23,128	4.6%
Nursing Home	\$1,397	\$1,623	3.8%	\$95,262	\$115,015	4.8%
Other Personal Care ^{c/}	\$308	\$487	12.1%	\$37,076	\$53,278	9.5%
Total	\$12,156	\$15,892	6.9%	\$1,139,856	\$1,551,254	8.0%

a/ Spending in freestanding ambulatory surgical centers is recorded as physician income. For hospital based ambulatory care centers, the facilities charge is recorded as hospital income with the physician fee for non-hospital staff recorded as physician income.

b/ "Other professional" services are those provided by health practitioners other than physicians or dentists, such as private-duty nurses, chiropractors, podiatrists, and optometrists

c/ "Other Personal" services include industrial inplant services (i.e. health care provided by employers for employees at the employer's establishment), and government expenditures for medical care not delivered in traditional medical provider sites (e.g. community centers, senior citizen centers, schools, and military field stations). Home and Community Waiver programs under Medicaid comprise a large portion of "Other Personal" spending.

Source: Centers for Medicare & Medicaid Services, Office of the Actuary.

In *Figure 3* we compare the CY 2000 and CY 2004 health spending data in Iowa along with its adjoining States. Iowa had rather low levels of growth during this time period in comparison to its neighboring States.

Figure 3
Average Annual Growth Rates of Iowa and
Adjacent States: CY 2000 and 2004 (in millions)

	State Spending CY 2000	State Spending CY 2004	Average Annual Growth Rate 2000-2004
Illinois	\$51,468	\$67,292	6.9%
Wisconsin	\$22,943	\$31,177	8.0%
Iowa	\$12,156	\$15,892	6.9%
Minnesota	\$21,227	\$29,524	8.6%
Missouri	\$23,080	\$31,317	7.9%
Nebraska	\$7,100	\$9,782	8.3%
South Dakota	\$3,079	\$4,103	7.4%

Source: Centers for Medicare & Medicaid Services.

2. Projected Spending in Iowa by Type of Service

In order to project Iowa spending to CY 2009 from CY 2004 we first calculate the ratio of the average annual growth rate experienced in Iowa from CY 2000 through CY 2004 to the comparable national growth rate for the same time period (see *Figure 4*). Notice that the overall growth rate was slightly slower in Iowa compared to the national rate (Iowa health spending grew approximately 6.9 percent annually versus 8.0 percent nationally). There were more significant differences within certain services. For example, Iowa nursing home spending only grew about three-quarters as much as it did in the US whereas dental spending grew about 21 percent faster in Iowa.

Care reported as home health spending actually decreased in Iowa, while national spending for these services grew at 8.8 percent from CY 2000 through CY 2004. The decrease in Iowa home health spending may be accounted for by a shift to spending for home and community based waivers, which is accounted for under other personal care spending. Other personal care spending actually had a faster average annual growth rate from CY 2000 through CY 2004 in comparison to the national average (12.1 percent versus 9.5 percent).

Figure 4
Projected Spending in Iowa by Type of Service: CY 2009 (in millions)

Type of Service	Ratio- State Growth/US Growth 2000-2004	Average Annual Growth - US 2004-2009	State Weighted AAG 2004-2009	State Estimate CY 2004	State Estimate CY 2009	State Estimate including Other Private Adjustment CY 2009
Hospital	0.81	7.2%	5.9%	\$6,179	\$8,216	\$7,924
Physician	1.02	6.2%	6.4%	\$3,719	\$5,061	\$5,061
Dental	1.21	5.8%	7.1%	\$735	\$1,034	\$1,034
Other Professional	1.01	5.5%	5.6%	\$557	\$730	\$730
Home Health	-0.16	9.3%	-1.5%	\$310	\$288	\$282
Prescription Drugs	0.85	7.0%	5.9%	\$2,021	\$2,698	\$2,698
Medical Durables	1.11	2.7%	2.9%	\$261	\$302	\$302
Nursing Home	0.79	4.5%	3.6%	\$1,623	\$1,934	\$1,878
Other Personal Care	1.28	8.8%	11.3%	\$487	\$830	\$830
Total	0.87	6.7%	5.8%	\$15,892	\$21,092	\$20,740

Source: Lewin Group estimates using state health spending and cost projections data provided by the Centers for Medicare & Medicaid Services, Office of the Actuary. See National Health Expenditure Data, Projected, available as of March 29, 2008 at:

http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp#TopOfPage

After calculating the ratio of Iowa to US growth in health spending, we apply that ratio to the projected US average annual growth rates for CY 2004 through CY 2009 in order to obtain Iowa weighted projected average annual growth rates. The projected US growth rates are also developed by CMS.¹¹ The Iowa adjusted growth rates are used to extrapolate the CY 2004 state health spending estimates into the future. After this process, we end up with CY 2009 total health spending amounting to approximately \$21.1 billion.

Before finalizing the total health spending amount, we also adjust for other private spending. Under the CMS definition, other private funds include spending from philanthropic sources as well as “other sources of income.” For example, home health agencies, skilled nursing facilities and hospitals collect revenue from gift shops, parking lots and investment income. These “other sources of income” are accounted for separately in our analysis. Therefore, we estimate other private spending attributed to the “other sources of income” and remove them from the total spending amounts. The adjustment is based on a cross-walk between the NHE and MEPS health expenditure estimates reported by CMS and AHRQ staff.¹²

This process leaves the control total for Iowa health spending, excluding the net cost of providing health insurance (which includes administrative costs) and free-from-provider care (i.e. charity care not captured by cost-shifts), at nearly \$20.7 billion (see *Figure 4*).

C. Spending under Medicare

Historical Medicare and Medicaid/hawk-i spending are also available from the State Health Accounts estimated by CMS (*Figure 5*). Total spending for Iowans in CY 2004 was \$2.8 billion under Medicare and \$2.3 billion under Medicaid/hawk-i. The Medicaid/hawk-i funding includes all programs receiving a Federal match and reported on the CMS-64 forms submitted to the Centers for Medicare & Medicaid Services. This includes the traditional Medical Assistance program, the State Children’s Health Insurance Program (hawk-i and Medicaid expansion), Medicaid managed care programs, several waiver programs, mental health community programs, and certain programs for other medical services.

¹¹ Centers for Medicare & Medicaid Services, Office of the Actuary. National Health Expenditure Data, Projected. <Available as of March 29, 2008 at: http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp#TopOfPage >

¹² Sing, M. et al. 2006. Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002. Health Care Financing Review, 28(1): 25-40. We decreased hospital, home health, and nursing home spending by 3.16, 1.75 and 2.74 percent respectively.

Figure 5
Medicare and Medicaid/Hawk-i Historical Spending (in millions)

Type of Service	Medicare			Medicaid/Hawk-i		
	CY 2000	CY 2004	Average Annual Growth 2000-2004	CY 2000	CY 2004	Average Annual Growth 2000-2004
Hospital	\$1,361	\$1,769	6.8%	\$597	\$720	4.8%
Physician	\$475	\$648	8.1%	\$106	\$203	17.6%
Dental	\$0	\$0	0.0%	\$28	\$45	12.6%
Other Professional	\$62	\$91	10.1%	\$8	\$73	73.8%
Home Health	\$44	\$97	21.9%	\$27	\$52	17.8%
Prescription Drugs	\$28	\$51	16.2%	\$166	\$293	15.3%
Medical Durables	\$38	\$57	10.7%	\$0	\$0	0.0%
Nursing Home	\$48	\$88	16.4%	\$452	\$582	6.5%
Other Personal Care	\$0	\$0	0.0%	\$199	\$352	15.3%
Total	\$2,056	\$2,801	8.0%	\$1,583	\$2,320	10.0%

Source: Centers for Medicare & Medicaid Services, Office of the Actuary.

Before projecting Medicare forward to CY 2009 we model the effects of the implementation of the Medicare prescription drug program, Part D, on Medicare spending in 2004. The Part D program significantly changed the spending pattern across services under Medicare and other payers beginning in CY 2006. Because state-level data on spending by payer for CY 2006 are not available, we use the HBSM to simulate the distribution of Iowa spending for Medicare and other sources (e.g. Medicaid, employer sponsored insurance, household out-of-pocket spending, etc...) by type of service after implementation of Part D (see *Figure 6*).

Once we estimate CY 2004 Medicare spending adjusted for implementation of Part D, then we project total Medicare spending to CY 2009 using the CMS projections of national Medicare spending. Using this approach, CY 2009 Medicare spending for benefits amount to approximately \$4.1 billion. We estimate an additional \$188.3 million in administrative costs based upon national estimates of Medicare administrative costs relative to benefits developed by CMS.

Because the Part D adjustment is applied prior to projecting all the source of funding estimates to 2009 and because we have already estimated a total spending amount for prescription drugs, this methodology automatically adjusts prescription drug spending in the other sources of funds.

Figure 6
Medicare Projections (in millions)

Type of Service	CY 2004	w/ RX CY 2004	CY 2009
Hospital	\$1,769	\$1,769	\$2,256
Physician	\$648	\$648	\$869
Dental	\$0	\$0	\$0
Other Professional	\$91	\$91	\$117
Home Health	\$97	\$97	\$83
Prescription Drugs	\$51	\$501	\$640
Medical Durables	\$57	\$57	\$61
Nursing Home	\$88	\$88	\$98
Other Personal Care	\$0	\$0	\$0
Total	\$2,801	\$3,251	\$4,123

Source: Lewin Estimates using the Health Benefits Simulation Model (HBSM).

D. Medicaid/Hawk-i Projections

The Medicaid estimates for CY 2009 are based upon the projected expenditures for programs administered by the Iowa Department of Human Services (DHS). As mentioned earlier, the Medicaid programs include the traditional Medical Assistance program, the State Children’s Health Insurance Program (hawk-i and Medicaid expansion), Medicaid managed care programs, several waiver programs, mental health community programs, and certain programs for other medical services.

1. Program Spending in CY 2009

In state fiscal year (SFY) 2009, DHS estimates \$2,596.2 million in Medicaid expenditures, excluding administrative costs.¹³ In order to avoid double counting with Medicare funds, we exclude Medicaid payments for Medicare Part A and B premiums for dual-eligible enrollees. Payments made by Medicaid to Medicare for duals’ Medicare Part D coverage, known as “clawback” payments, are also excluded to avoid double-counting. DHS estimates SFY 2009 Medicare payments to be \$82.5 million.¹⁴

Also, Federal Disproportionate Share (DSH) funds are excluded from the Medicaid funding category and included in the Other Public source of funding category. We do this as these programs are not based upon utilization by the Medicaid population. DHS estimates SFY 2009 Federal DSH payments to be \$37.9 million.

¹³ Concannon, K and Gessow, E. February 6, 2008. “Iowa Medicaid Program.” Presentation to: Health and Human Services Appropriations Subcommittee.

¹⁴ Ibid.

According to DHS projections of hawk-i enrollment and per enrollee monthly costs, SFY 2009 spending for the Hawk-i program amounts to \$59.7 million. We estimate administrative costs for the hawk-i program based upon estimates reported in the DHS budget document, *Offer 401-HHS-004: SCHIP*. We estimate administration expenditures for the Medicaid program based upon the percentage of administration costs as a portion of total Medicaid costs that is calculated from data reported on the CMS-64 for SFY 2007. We also include an estimate of certain administrative expenses incurred by managed care organizations and third party administrators that are contracted by DHS.

After making all of the necessary exclusions, we project the SFY estimates for Medicaid and hawk-i forward to CY 2009 based on the historical growth in expenditures for these programs. *Figure 7* provides a summary of our Medicaid/hawk-i estimates. We estimate nearly \$2,880.7 million in expenditures for CY 2009 including administrative expenses. Note that we aggregate all the spending across all Medicaid related programs administered by DHS in these estimates.

Figure 7
Summary of the Iowa Department of Human Services Projected
Medicaid/Hawk-i Expenditures (in millions)

	Most Recent Historical Estimate	Projected CY 2009
Medicaid		
Services		
DHS estimate of services w/o Medicare premium payments (\$82.5 million) or administrative costs	\$2,596.2 (SFY 2009)	\$2,674.1
DHS estimate of Federal DSH allotment	\$37.9 (SFY 2009)	\$39.1
Total Medicaid spending without DSH		\$2,635.1
Administration ^{a/}		
Administration as a percentage of Benefits from SFY 2007 CMS-64	4.9%	
Administration including Case Management and Iowa Plan programs ^{b/}	\$172.4 (SFY 2009)	\$177.6
Hawk-i		
Services		
Average of SFY 2009 (\$59.7 million) and SFY 2010 (\$74.3 million) DHS estimate of services excluding Lewin estimate for third party administration (TPA) and managed care administration.		\$62.6
Administration ^{a/}		
DHS Administration as a percentage of hawk-i spending from <i>Offer 401-HHS-004: SCHIP</i>	1.5%	
Administration including DHS administration, TPA and managed care administration estimates ^{c/}		\$5.4
Medicaid/Hawk-i Total		
Services		\$2,697.7
Administration		\$183.0
Total		\$2,880.7
Admin percent of benefits (i.e. services w/o "clawback", Medicare premiums and Federal DSH)		6.8%

a/ Includes an estimate of certain administrative expenses in the Medicaid/hawk-i programs, such as managed care and third party administrator administrative expenses, not explicitly accounted for in DHS estimates.

b/ Note that all Case Management expenses estimated by DHS (\$39.9 million) are included under administration. We also assume that Iowa Plan spending has the same proportion of administration as reflected for the overall Medicaid program in the CMS-64 estimate.

c/ We estimate 1.5 percent of hawk-i spending, \$67.0 million, to be DHS administrative spending for hawk-i. We also assume that 1.5 percent for TPA administration expenses are included in the hawk-i spending (i.e. the \$67.0 million) as well as administrative costs for managed care plans, which we assume to be 4.9 percent of benefits.

Source: Lewin estimates based upon data provided to us by the Iowa Department of Human Services.

We base the distribution of Medicaid/hawk-i spending by the service categories necessary for the HBSM model on the service distribution estimated by CMS for CY 2004 spending (see *Figure 5*).

E. Other Public and Safety Net Programs

There are several public programs or funding sources that are not accounted for by Medicare, Medicaid/hawk-i and our other funding categories such as TRICARE. Many of these other public programs act as “safety net” programs for residents of Iowa. Much of the funding for these programs is financed through various Iowa State Departments.

Figure 8 summarizes the funding from other public sources. The Iowa Hospital Association (IHA) reports county tax funds used to provide health care to the uninsured and under-insured in Iowa’s county-owned community hospitals.¹⁵ IHA estimated \$84.8 million for SFY 2007. We estimate approximately \$101.0 million in county funds for CY 2009 based on the projected average annual growth of hospital spending nationally.

Figure 8
Summary of CY 2009 Other Public Spending (in millions)

	Most Recent Historical Estimate	CY 2009 Spending
County Hospital Funds	\$84.8 (SFY 2007)	\$101.0
Substance Abuse ^{a/}	\$1.0 (SFY 2008)	\$1.1
IowaCare	\$108.4 (SFY 2007)	\$127.4
Total	NA	\$229.4

a/ Historical Estimate from the Iowa Department of Public Health, Division of Behavioral Health. CY 2009 estimate based upon average annual growth rate of national health spending projections.

Source: Summary of Lewin estimates based on Iowa State data.

Funding for the IowaCare program is administered through the Iowa Department of Human Services. The IowaCare program provides a limited health benefit package, including inpatient and outpatient hospital, dental, physician, and transportation services, for low-income individuals who are not eligible for Medicaid or who do not meet federal criteria for categorically or medically needy individuals. The IowaCare network is limited to two medical centers and four State mental health institutes for inpatient psychiatric care. DHS reports 108.4

¹⁵ Iowa Hospital Association. September 2007. “Profiles: Documenting the Social and Economic Importance of Iowa Hospitals and Health Systems.” <Available as of March 28, 2008 at: <http://www.ihaonline.org/publications/profileserv/Profiles%20-%20Cvr-Intro-TOC.pdf>>

million in IowaCare spending for SFY 2007. Based on the projected average annual growth in total health spending, we project total spending for IowaCare to be \$127.4 million in CY 2009.

Total other public funds are projected to reach \$229.4 million in CY 2009. This includes approximately \$8.1 million in administrative costs for the IowaCare program, which we estimate based upon administrative costs reported under the Iowa Medicaid program. We also assume that the \$39.1 million in Federal Medicaid DSH funding, which we excluded from the Medicaid amount is embedded in the IowaCare total.

2. Workers Compensation

The main source for medical benefits paid under workers compensation insurance is the National Academy of Social Insurance (NASI). This is the same source used by CMS for their workers compensation estimates. NASI estimates medical benefits for Iowa to be \$241.2 million (excluding Administration costs) in CY 2005 (*Figure 9*). These funds included spending from private carriers, and self-insured funds.

Figure 9
Projected Iowa Workers Compensation Spending by
Type of Service CY 2009 (in millions)

	CY 2005	CY 2009
Hospital Services	\$59	\$62
Physician Services	\$121	\$142
Other Prof Services	\$27	\$29
Prescription Drugs	\$32	\$42
Durables	\$3	\$3
Administration	\$75	\$109
Total	\$316	\$387

Source: Lewin estimates based on data from National Academy of Social Insurance.

We project the CY 2005 figure to CY 2009 using CMS national projections. Workers compensation estimates are included in the CMS estimates of historical health spending; however, workers compensation spending is aggregated along with other sources in the “other state and local” category under their health accounting framework for their projection estimates. Therefore, we use other state and local projections by type of service and assume that the portion of other state and local spending attributable to workers compensation remains constant from the last year of available historical data through the projection period. This provides us with a growth rate from CY 2005 through CY 2009 and a service distribution estimate of workers compensation in CY 2009 at the national level. We assume that the national growth of total workers compensation spending, as well as its service distribution is similar to that experienced in Iowa.

F. Employer Sponsored Insurance (ESI)

The category of employer sponsored insurance (ESI) includes expenditure for health services for workers and dependents, including both private and public employers. There is no one source that provides us with information on all employer health spending. Therefore, we need to piece together data from multiple sources. In this section, we present our estimates separately for private, state and local and federal employees.

Figure 10 summarizes our estimates of spending for ESI. These amounts include both the employer and the employee shares of the premium, which includes both benefits costs and insurer administrative costs. We estimate that total premiums will be \$8.6 billion in CY 2009.

Figure 10
Total Premium and or Revenue Amounts for
Employer-Sponsored Insurance CY 2009 (in millions)

Employer Type	Total Premiums			
	Total	Private	State and Local	Federal
Group - workers	\$7,636.2	\$5,818.7	\$1,645.9	\$171.6
Retirees	\$1,054.5	\$680.1	\$79.7	\$294.7
All Enrollees	\$8,690.7	\$6,498.8	\$1,725.5	\$466.4

Source: Summary of Lewin estimates

In this section, we explain how we developed estimates of employer health spending for active workers and their dependents. Our estimates of employer spending for retiree benefits are presented below in a separate section.

1. Private Workers

We obtain data for private sector ESI premiums by firm size from the Medical Expenditure Panel Survey-Insurance Component (MEPS-IC). *Figure 11* displays average premiums and employee and employer contributions by firm size and individual/family coverage. Also shown are the CY 2009 projections for the number of covered workers using data from the Current Population Survey (CPS) administered by the US Census Bureau. We multiply the average premiums and number of insured workers by firm size and individual/family coverage status in order to calculate a CY 2005 total premium amount. We then grow the CY 2005 amount by the CMS projected trend in private insurance growth in order to obtain CY 2009 employer sponsored insurance funding for workers.¹⁶

¹⁶ Note that we apply the same adjustment as we did for total health spending to account for the relative difference in Iowa and US average annual growth in health care spending.

Figure 11
Private Sector CY 2005 MEPS-IC and CPS Data ^{a/}

	Total Premium (MEPS)	Employee Contribution (MEPS)	Employer Contribution	CY 2009 Estimated Number of Insured Workers CPS	Total CY 2005 Employer Premiums (in millions)	Est. CY 2009 Spending (in millions)
Individual Coverage						
Under 10	\$3,979	\$828	\$3,151	37,352	\$148.6	\$192.4
10-24	\$3,476	\$612	\$2,864	31,125	\$108.2	\$140.0
25-99	\$3,403	\$869	\$2,534	49,499	\$168.4	\$218.0
100-999	\$3,788	\$839	\$2,949	75,664	\$286.6	\$371.0
1000 or more	\$3,692	\$713	\$2,979	134,125	\$495.2	\$641.0
Total	\$3,686	\$762	\$2,924	327,765	\$1,207.1	\$1,562.4
Family Coverage						
Under 10	\$8,953	\$1,756	\$7,197	33,049	\$295.9	\$383.0
10-24	\$7,949	\$2,856	\$5,093	26,376	\$209.7	\$271.4
25-99	\$9,440	\$3,035	\$6,405	44,533	\$420.4	\$544.1
100-999	\$9,312	\$2,854	\$6,458	85,456	\$795.8	\$1,030.0
1000 or more	\$9,531	\$2,111	\$7,420	164,373	\$1,566.6	\$2,027.8
Total	\$9,359	\$2,436	\$6,923	353,787	\$3,288.3	\$4,256.3
Total				681,552	\$4,495.4	\$5,818.7

a/ The MEPS data contains information on employees enrolled in both fully insured and self-funded plans.

Source: Lewin Group estimates based upon the Iowa sub-sample of the Insurance Component of the Medical Expenditures Panel Survey (MEPS) data.

We also note that according to the MEPS data, approximately one-third of covered workers were enrolled in fully-insured purchased plans, whereas two-thirds were enrolled in self-insured (i.e. ERISA) plans.

2. State and Local Workers

We used an estimate of spending for State and Local government employees developed by the Agency for HealthCare Research and Quality (AHRQ). AHRQ developed an estimate of government employee health insurance data using the Medical Expenditure Panel Survey Insurance Component (MEPS-IC). The MEPS data is for State and Local government employees combined. These data include information on all employees for state and local employers.

Figure 12
CY 2009 State and Local Employee Estimates for Iowa

Average Premium from MEPS (CY 2005) ^{a/}	Average Premium (CY 2009)	Average Employer Contribution (Share from 2005 MEPS)	Average Employee Contribution (Share from 2005 MEPS)	Total Covered Workers (CY 2009 from CPS)	Total Premiums (in millions)
\$7,812	\$10,111	\$8,506	\$1,606	162,776	\$1,645.9

a/ This data includes information on both State and Local government employees.
Source: Lewin Group projections based upon unpublished data provided by the US Agency for Healthcare Quality and research (AHRQ) based upon the Iowa sub-sample of the Insurance Component of the Medical Expenditures Panel Survey (MEPS) data.

In order to estimate CY 2009, we use the 2005 MEPS per capita premium estimates projected to CY 2009, using the CMS private insurance per enrollee projections, multiplied by the estimate of the number of state and local enrollees based on the CPS (*Figure 12*).

3. Federal Workers

Figure 13 displays our estimates of premiums for Federal employees working in the state of Iowa. We use the projected average premium amounts for State and local employees and multiply that figure by the estimated number of Federal enrollees based on the CPS.

Figure 13
CY 2009 Federal Employee Estimates for Iowa

Average Premium (CY 2009)	Average Employer Contribution	Average Employee Contribution	Total Covered Workers (CY 2009 from CPS)	Total Premiums (in millions)
\$10,111	\$8,506	\$1,606	16,975	\$171.6

Source: Lewin Group Estimates.

G. Employer Sponsored Retiree Coverage

This group includes coverage provided under employer-sponsored health plans for both government and privately insured retirees. This includes full coverage for non-Medicare eligible retirees (i.e., early retirees).

1. Private Retirees

AHRQ estimated private sector retiree premiums and enrollments for the state of Iowa in 2005 using the MEPS-IC (*Figure 14*).

Figure 14
Iowa Private Sector Retiree CY 2005 MEPS-IC Premium and Enrollment Data (in millions)

	Covered Workers	Total Premiums	Employer Contributions
Single Retirees Under 65	9,588	\$49.9	\$19.3
Single Retirees 65 and Over	23,093	\$81.8	\$59.3
Married Retirees Under 65	14,672	\$175.6	\$111.1
Married Retirees 65 and Over	23,136	\$213.0	\$107.0
Total	70,489	\$520.4	\$296.8

Source: Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, using 2005 data from the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) and US Census Bureau.

We project premiums to CY 2009 using the CMS estimate of projected growth in national private health insurance costs. Total premiums for CY 2009 amount to \$680.1 million.

2. State and Local Retirees

AHRQ also estimated state and local sector retiree premiums and enrollments for the state of Iowa in 2005 using the MEPS-IC (*Figure 15*).

Figure 15
Iowa State and Local Retiree CY 2005 MEPS-IC Premium and Enrollment Data (in millions) ^{a/}

	Covered Retirees	Total Premiums	Employer Contributions
Single Retirees Under 65	5,830	\$30.9	\$7.7
Single Retirees 65 and Over	3,512	\$11.9	\$1.7
Married Retirees Under 65	554	\$6.6	\$0.7
Married Retirees 65 and Over	1,642	\$11.6	\$0.0
Total	11,538	\$61.0	\$10.2

a/ MEPS government retiree estimates do not include State employees.

Source: Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, using 2005 data from the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) and US Census Bureau.

The CY 2009 estimates are also projected using the CMS estimate of projected growth in national private health insurance spending. Using this approach, we estimate State and Local retiree premiums to be \$79.7 million in CY 2009.

3. Federal Retirees

In order to estimate premiums for federal retirees, we use data from the U.S. Office of Personnel Management on the number of covered retirees and total premiums under the Federal

Employment Health Benefit Plan (FEHBP) system. We have data on enrollment and premiums as of August 2007. We project the average premiums from \$8,449 in CY 2007 to \$9,698 in CY 2009 using the national growth rate in private health insurance expenditures, as projected by CMS. This results in an estimated \$294.7 million in retiree premiums for Federal workers for CY 2009.

H. Individually Purchased Non–Group Insurance

In this analysis, we define the non-group market to include the state’s high risk pool, people purchasing individual coverage from insurers and the Medicare Supplemental insurance market.

1. High Risk Group - HIPlowa

The Health Insurance Plan of Iowa (HIPlowa) was created by the Iowa State Legislature to provide access to health insurance coverage to all residents of the state who are otherwise unable to obtain individual health insurance typically due to preexisting conditions. HIPlowa offers comprehensive preferred provider plans with pharmacy benefits, but these plans for “high risk” individuals generally cost considerably more than regular insurance policies.

Based on data from the Iowa Comprehensive Health Insurance Association, which administers the program, we project medical benefits to reach approximately \$23.2 million in CY 2009, while administration expenses amount to \$4.9 million.

2. Individual Market

We use data on health care insurance plans provided to us from the Iowa Insurance Division (see *Figure 16*) in order to estimate premiums and benefits for the individual insurance market. We assume that losses incurred are a proxy for medical benefits. We extrapolate to CY 2009 from CY 2006 using the CMS projection of the national trend in private insurance growth, which leads to an estimated amount of \$258.4 million for health care services funded by individual market health plans.

Figure 16
Individual Market Premiums and Benefits (in millions)

	Premiums Earned	Losses Incurred
CY 2006 ^{a/}	\$224.6	\$168.4
CY 2009	\$258.4	\$193.7

Source: Report from required annual filings provided to us by the Iowa Insurance Division.

3. Medicare Supplemental Insurance Market

Similarly to the individual market, we use data from the Iowa Insurance Division (see *Figure 17*) in order to estimate premiums and benefits for the Medicare supplemental insurance market. We estimate an amount of \$524.2 million in CY 2009 for health care services funded by Medicare supplemental insurance plans.

Figure 17
Medicare Supplemental Insurance (in millions)

	Premiums Earned	Losses Incurred
CY 2006 ^{a/}	\$455.6	\$359.9
CY 2009	\$524.2	\$414.0

Source: Report from required annual filings provided to us by the Iowa Insurance Division.

I. Household Out-of-Pocket, Other Private and TRICARE

Independent estimates of health spending in Iowa are not available for household out-of-pocket spending, spending for military personnel, veterans, TRICARE, and other private spending. As mentioned earlier, other private spending includes philanthropic funds. For these allocations, we estimated the distribution of health spending by type of service and source of payment using the data from the MEPS household survey adjusted to reflect Iowa demographics. We controlled our estimates for these sources of funds to the control total of aggregate personal health care spending by type of service described above (i.e. \$20.7 billion) less the amounts from the other sources of funds. We assumed the remainder of spending for personal health care services in Iowa was distributed by source of payment and type of service as shown in the HBSM/MEPS data after it is adjusted to reflect CPS Iowa-specific population data. This provided us with estimates of spending for: household out-of-pocket expenditures, other private and TRICARE.

We estimate spending for these three sources of funding in CY 2009 to be approximately \$4.8 billion. This includes \$4.0 billion in household out-of-pocket spending, \$598 million in TRICARE spending and \$169 million in other private health spending. These figures exclude administrative spending, which will be discussed in more detail below.

J. Program administration and the Net Cost of Providing Insurance

Insurance plans and government health benefits programs incur costs for administering coverage. For private insurers, estimates of overall administrative costs can be derived from data reported by the Department of Insurance for those who obtain coverage through a fully-insured plan (i.e., the insurer is at-risk for claims). Data for self-funded plans can be estimated from other sources. In addition, the various government programs can generally provide information on their cost of administration, including eligibility determinations for income-tested programs. In this section, we explain how we estimated administrative costs for public programs and private insurers.

1. Private Insurance

CMS estimates administrative costs for private insurance as the differences between premiums earned and benefits incurred. This typically includes claims administration, general administration, agent and broker commissions and insurer profits, as well as premium taxes, net investment income, net realized capital gains, reinsurance recoveries and net income. *Figure 18* displays estimates of the net-cost ratio for various insurance markets. The net cost ratio is

calculated as the difference between premiums earned and losses incurred (i.e. benefits incurred) as a proportion of premiums earned.

Insurer administrative costs vary widely with the size of the group purchasing insurance. For example, according to insurer annual filings, individual accident and health insurers have administrative and other costs equal to approximately 33.4 percent of earned premiums (see *Figure 18*). By contrast, the equivalent figure for group accident and health insurers is 18.7 percent of earned premiums.

Figure 18
Estimates of the Net Cost of Insurance: CY 2006 (in millions)

	Premiums Earned	Losses Incurred	Net Cost ratio
Workers Compensation	\$525.2	\$376.9	0.39
Health Insurance	\$2,511.5	\$2,071.3	0.21
Medicare Supplemental	\$455.6	\$359.9	0.27
Group (fully-insured)	\$1,831.2	\$1,543.1	0.19
Individual	\$224.6	\$168.4	0.33

Source: Report from required annual filings provided to us by the Iowa Insurance Division.

These net cost ratios shown in *Figure 18* were used to estimate the amount of administrative expenses for the various insurance markets. Further assumptions were made based on national studies on administration expenses for self-funded plans and retiree plans.

2. Government Program Administration

Administrative costs for government programs have increased in recent years. Public program administrative costs as a percentage of benefit payments are projected by CMS to increase from 5.3 percent in 1999 to 7.2 percent in 2009. Much of this growth in program administrative costs reflects rapid growth in the number of Medicaid beneficiaries and recent expansions in eligibility for children under the SCHIP programs, as well as the expansion of coverage under Medicare under Parts C and D through private health plans.

Estimates for the costs of administering the Medicaid/hawk-i and other public programs are available through the data in budget documents. Estimates for Medicare and TRICARE are based on national averages as reported in the CMS data.

K. Uncompensated Care

We define uncompensated care as free care provided to uninsured individuals. It does not include bad debt from individuals who are insured. Hospitals are by far the largest providers of indigent care, a large portion of which goes unpaid.

For our analysis we used data on uncompensated care provided by hospitals from the Iowa Hospital Association (IHA). We estimate other uncompensated care spending, such as care provided in physician offices from CMS and MEPS data using the Iowa version of the HSBM.

According to the IHA data, uncompensated charity care in hospitals amounted to \$119.0 million, based on costs, for CY 2006. IHA also estimates a similar amount, \$120.0 million for other uncollected patient expenses (i.e. bad debt). We aged these data to CY 2009 based on historical growth in uncompensated care experienced by the hospital industry. Using this assumption, we estimate CY 2009 hospital statewide uncompensated care attributable to charity care, on a cost basis, to be \$158.8 million. We estimate approximately \$215.4 million in uncompensated charity care across all providers.

L. Summary of Health Spending in Iowa

The results of this analysis are a detailed accounting of health expenditures in Iowa showing total state expenditures by type of service and source of payment. As shown in *Figure 19*, we estimate total health spending in Iowa to be about \$22.1 billion in CY 2009.

Estimated spending is broken down as follows:

- Household out-of-pocket spending for health services (i.e., coinsurance, deductibles and self-pay) will be \$4.0 billion.
- Total private insurance expenditures are projected to be \$9.7 billion, of which:
 - About \$7.6 billion will be for employer coverage of workers (including government workers);
 - About \$1.1 billion will be for employer coverage of retirees (including government retirees);
 - About \$0.8 billion will be spent in non-group coverage; and
 - There is also expected to be about \$169 million in other private health spending.
- We estimate Medicare and Medicaid/hawk-i spending in Iowa will be \$7.2 billion in CY 2009:
 - Medicare is estimated to be about \$4.3 billion;
 - Medicaid/hawk-i is estimated to be \$2.9 billion; and
 - Spending for other public programs is estimated to be \$229 million.
- We estimate spending for workers compensation and TRICARE in Iowa to be \$1.0 billion CY 2009.

Figure 19
Personal Health Care Spending in Iowa by Type of Service and Source of Funding: CY 2009 (in millions) ^a

	Total - PHC	Hospital	Physician	Dental	Other Profes- siona ^b	Home Health	Prescrip- tion Drugs	Durables	Nursing Home	Other Personal ^c	Adminis- tration	Total Spending Incl Admin	Total w/o Admin & LTC
Out-of-Pocket	\$4,032	\$347	\$646	\$466	\$200	\$155	\$571	\$199	\$1,204	\$245	\$0	\$4,032	2,428
Employer Workers	\$7,043	\$3,139	\$2,417	\$460	\$221	\$0	\$774	\$31	\$0	\$0	\$593	\$7,636	7,043
Employer Retirees	\$978	\$436	\$305	\$30	\$33	\$0	\$170	\$5	\$0	\$0	\$77	\$1,054	978
Non-Group	\$631	\$272	\$251	\$19	\$30	\$0	\$55	\$3	\$0	\$0	\$180	\$811	631
Medicare	\$4,123	\$2,256	\$869	\$0	\$117	\$83	\$639	\$61	\$98	\$0	\$188	\$4,311	3,942
Medicaid	\$2,698	\$813	\$241	\$52	\$83	\$39	\$338	\$0	\$572	\$559	\$183	\$2,881	1,527
TRICARE	\$572	\$402	\$89	\$0	\$0	\$0	\$81	\$0	\$0	\$0	\$26	\$597	572
Other Public	\$221	\$105	\$51	\$1	\$5	\$2	\$27	\$1	\$5	\$26	\$8	\$229	188
Workers Compensation	\$277	\$62	\$142	\$0	\$29	\$0	\$42	\$3	\$0	\$0	\$109	\$387	277
Other Private ^d	\$166	\$93	\$52	\$5	\$11	\$3	\$2	\$0	\$0	\$0	\$4	\$170	163
TOTAL	\$20,740	\$7,924	\$5,061	\$1,034	\$730	\$282	\$2,698	\$302	\$1,878	\$830	\$1,368	\$22,108	17,749
Free-From-Provider	\$215	\$159	\$17	\$21	\$14	\$0	\$0	\$5	\$0	\$0	\$0	\$213	213

a/ Spending in freestanding ambulatory surgical centers is recorded as physician income. For hospital based ambulatory care centers, the facility charges are recorded as hospital income with the physician fee for non-hospital staff recorded as physician income.

b/ "Other professional" services are those provided by health practitioners other than physicians or dentists, such as private-duty nurses, chiropractors, podiatrists, and optometrists

c/ "Other Personal" services include industrial inplant services (i.e. health care provided by employers for employees at the employer's establishment), and government expenditures for medical care not delivered in traditional medical provider sites (e.g. community centers, senior citizens centers, schools, and military field stations). Home and Community Waiver programs comprise a large portion of "Other Personal" spending.

d/ Includes philanthropic funds. Excludes other sources of other private funds such as revenue from parking lots, gift shops and cafeterias, as well as investment income.

Source: Lewin estimates.

Appendix B: Summary Description of the Health Benefit Simulation Model (HBSM)

The purpose of this document is to provide a summary of the data and methods used in the Lewin Group Health Benefits Simulation Model (HBSM). We begin by summarizing the overall modeling approach used to simulate the cost and coverage impacts of programs to expand insurance coverage. We also provide a discussion of key components of the model that are most relevant to some of the policy proposals that have emerged in recent years. A more detailed documentation of the full model is available upon request.

We present our summary of HBSM in the following sections:

- Modeling Approach;
- Database;
- Medicaid Expansions;
- *Employer and Employee Take-up*;
- Insurance Markets Model; and
- Tax simulations.

A. Modeling Approach

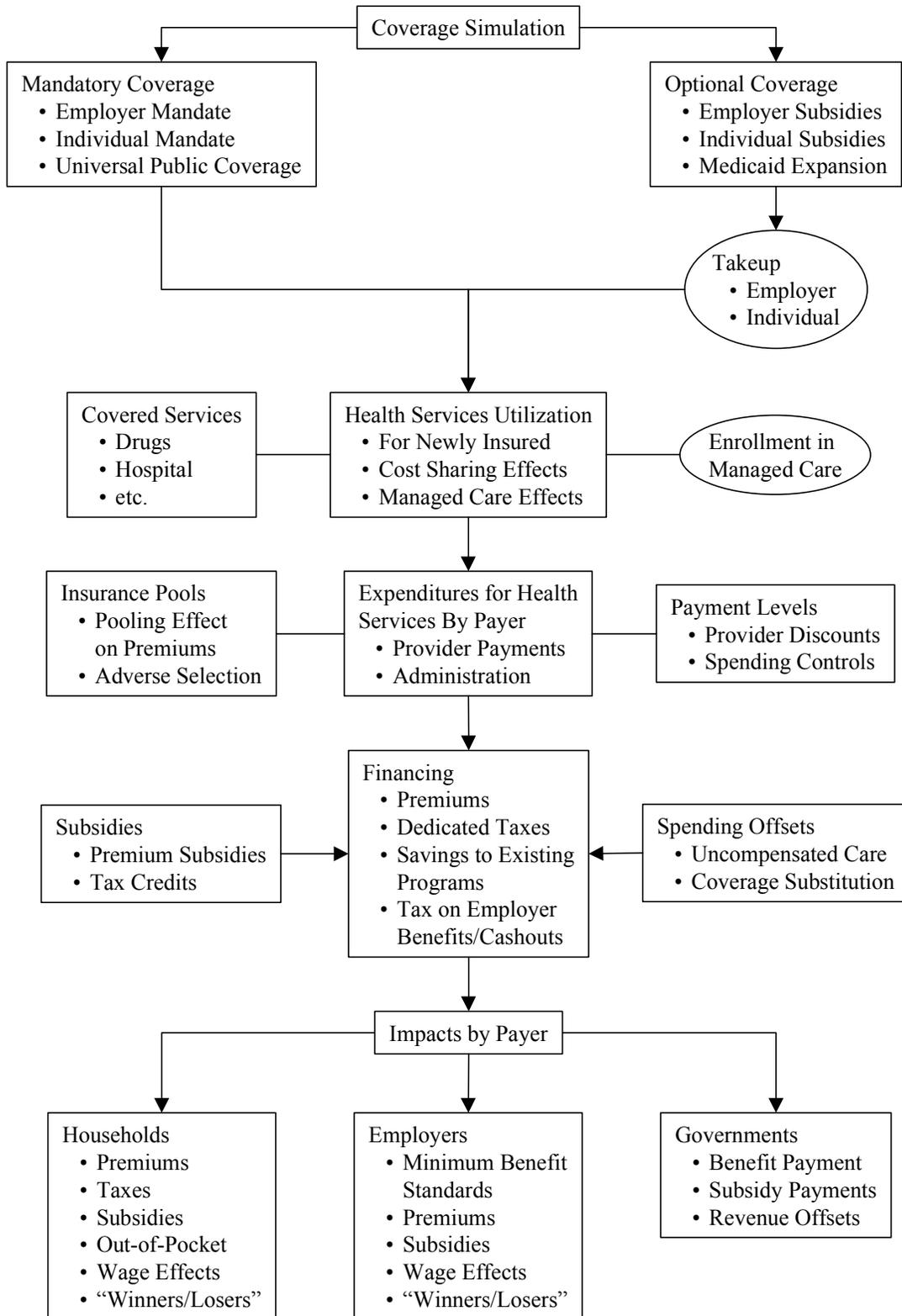
The Health Benefits Simulation Model (HBSM) is a micro-simulation model of the U.S. health care system. HBSM is a fully integrated platform for simulating policies ranging from narrowly defined Medicaid coverage expansions to broad-based reforms such as changes in the tax treatment of health benefits. The model is also designed to simulate the impact of numerous universal coverage proposals such as single-payer plans and employer mandates. The use of a single modeling system for these analyses helps assure that simulations of alternative proposals are executed with uniform and internally consistent methodologies.

HBSM was created to provide comparisons of the impact of alternative health reform models on coverage and expenditures for employers, governments and households. The key to its design is a “base case” scenario depicting the distribution of health services utilization and expenditures across a representative sample of households under current policy for a base year such as 2006. We developed this base case scenario based upon recent household and employer data on coverage and expenditures. We also “aged” these data to be representative of the population in 2006 based upon recent economic, demographic and health expenditure trends. The resulting database provides a detailed accounting of spending in the U.S. health care system for stakeholder groups. These base case data serve as the reference point for our simulations of alternative health reform proposals.

The model first simulates how these policies would affect sources of coverage, health services utilization and health expenditures by source of payment (*Figure 1*). Mandatory coverage programs such as employer mandates or single-payer models can be simulated based upon the detailed employment and coverage data recorded in the database. The model also simulates enrollment in voluntary programs such as tax credits for employers and employees, based upon

multivariate models of how coverage for these groups varies with the cost of coverage (i.e., modeled as the premium minus the tax credit). In addition, the model simulates enrollment in Medicaid and SCHIP expansions based upon a multivariate analysis of take-up rates under these programs, including a simulation of coverage substitution (i.e., “crowd out”).

Figure 1
Flow Diagram of the Health Benefits Simulation Model (HBSM)



HBSM is designed to facilitate comparisons of alternative health reform initiatives using uniform data and assumptions. For example, take-up rates for Medicaid and various tax credit/premium voucher proposals are simulated using uniform take-up equations and modules. Uniform methods are also used to simulate changes in health services utilization attributed to changes in coverage status and cost-sharing parameters. The model uses a series of uniform table shells for reporting the impacts of these policies on households, employers and governments. This uniform approach assures that we can develop estimates of program impacts for very different policies using consistent assumptions and reporting formats. The use of uniform processes also enables us to simulate the impact of substantially different policy options in a short period of time.

Once changes in sources of coverage are modeled, HBSM simulates the amount of covered health spending for each affected individual, given the covered services and cost-sharing provisions of the health plan provided under the proposal. This includes simulating the increase in utilization among newly insured people and changes in utilization resulting from the cost sharing provisions of the plan. In general, we assume that utilization among newly insured people will increase to the level reported by insured people with similar characteristics. We also simulate the impact of changes in cost sharing provisions (i.e., co-payments, deductibles, etc.) on utilization.

HBSM is based upon a representative sample of households in the U.S., which includes information on the economic and demographic characteristics of these individuals as well as their utilization and expenditures for health care. The HBSM household data are based upon the 1999 through 2001 Medical Expenditures Panel Survey (MEPS) that we use together with the March 2005 Current Population Survey (CPS). We also used the Kaiser/HRET survey of employers for policy scenarios involving employer level decisions. We adjusted these data to show the amount of health spending by type of service and source of payment as estimated by the office of the Actuary of the Centers for Medicare and Medicaid Services (CMS) and various agencies. The methods used to develop these baseline data are discussed below.

Changes in employer costs are assumed to be passed on to workers in the form of changes in wage growth over time. For example, policies that increase employer costs would result in a corresponding reduction in wages for affected workers, with a corresponding reduction in income and payroll tax revenues. Similarly, reductions in employer costs are assumed to be passed on to workers as wage increases. HBSM includes a tax module that simulates tax effects due to these changes in wages as well. The model will simulate wage pass-through under varying assumptions on how long it would take for the labor markets to adjust.

The model includes a simulation of health insurance premiums in the private small group and individual markets using the range of rating practices permitted in each state. This permits us to simulate the impact of options for implementing rate compressions proposals. It is also designed to simulate "adverse selection" that may result under policies that give employers and/or individuals a choice of alternative insurance pools with their own unique rating practices.

For example, some of the proposals analyzed in this study would give employers the option of enrolling in a public insurance pool at a community-rated premium. This would tend to attract employers and individuals with high health care costs who find that the community-rated

premium is less than the cost of an experience-rated plan for that group in the private market. The HBSM insurance market simulation is based upon a “synthetic firm” methodology, which we present below.

B. Baseline Database

The key to simulating changes in the health care system is to develop a baseline database that depicts the U.S. health care system in detail. Our HBSM baseline data is based upon the 1999 through 2001 Medical Expenditures Panel Survey (MEPS) data, which provide information on sources of coverage and health expenditures for a representative sample of the population. These data are adjusted to reflect the population and coverage levels reported in the 2005 Current Population Survey (CPS) data (with adjustments for under-reporting discussed below). We also statistically match workers in these data to the Kaiser/HRET survey of employers which provides additional detail on coverage provided through work.

The creation of the baseline data for the model is presented in the following sections:

- Household data;
- Employer data; and
- Benchmarking data.

1. Household Database

The HBSM baseline data is derived from a sample of households that is representative of the economic, demographic and health sector characteristics of the population. HBSM uses the 1999 through 2001 MEPS data to provide the underlying distribution of health care utilization and expenditures across individuals by age, sex, income, source of coverage and employment status. The use of data for three years substantially increases sample size, thus permitting us to develop more stable estimates of narrowly defined policy options.

We re-weighted the MEPS household data to reflect population control totals reported in the 2005 March CPS data. These weight adjustments were performed with an iterative proportional-fitting model, which adjusts the data to match approximately 250 separate classifications of individuals by socioeconomic status, sources of coverage and job characteristics in the CPS.¹⁷ Iterative proportional fitting is a process where the sample weights for each individual in the sample are repeatedly adjusted in a stepwise fashion until the database simultaneously replicates the distribution of people across each of these variables in the state.¹⁸

¹⁷ To bolster sample size for state level analyses, we have pooled the CPS data for 1998 through 2001. This is important when using the model to develop state-level analyses.

¹⁸ The process used is similar to that used by the Bureau of the Census to establish final family weights in the March CPS.

This approach permits us to simultaneously replicate the distribution of people across a large number of variables while preserving the underlying distribution of people by level of healthcare utilization and expenditures as reported in MEPS. These data can be further “tuned” in the re-weighting process to reflect changes in health service utilization levels (e.g., hospitalizations).¹⁹ This approach implicitly assumes that the distribution of utilization and expenditures within each of the population groups controlled for in this re-weighting process are the same as reported in the MEPS data.

We also “aged” the health expenditure data reported in the MEPS database to reflect changes in the characteristics of the population through 2006. These data are adjusted to reflect projections of the health spending by type of service and source of payment in the base year (i.e., 2006). These spending estimates are based upon health spending data provided by CMS and detailed projections of expenditures for people in Medicare and Medicaid spending across various eligibility groups. The result is a database that is representative of the base year population by economic and demographic group, which also provides extensive information on the joint distribution of health expenditures and utilization across population groups.

2. Employer Database

We re-weighted the MEPS household data to reflect population control totals reported in the 2005 March CPS data. The model includes a database of employers for use in simulating policies that affect employer decisions to offer health insurance. We used the survey of employers conducted by the Kaiser Family Foundation and the Health Research and Educational Trust (HRET). These data include about 2,000 randomly selected public and private employers with 3 or more workers, which provide information on whether they sponsor coverage and the premiums and coverage characteristics of the plans that insuring employers offer.

We statistically match each MEPS worker with one of the firms in the Kaiser/HRET data. Experience has shown that it is important that the individuals assigned to each firm be consistent with the employer’s workforce characteristics. The Kaiser/HRET data provide information on the distribution of workers by wage level. However, additional information such as age of worker and family/single status for insured people are not included in the database. To use these data in our analysis, we statistically matched the Kaiser/HRET data with employers surveyed in the 1991 Health Insurance Association of America (HIAA) employer survey data, which provides detailed information on the characteristics of each employer’s workforce including number of workers by:²⁰

Full-time/part-time status;

- Age;
- Gender;
- Coverage status (eligible enrolled, eligible not enrolled and ineligible);

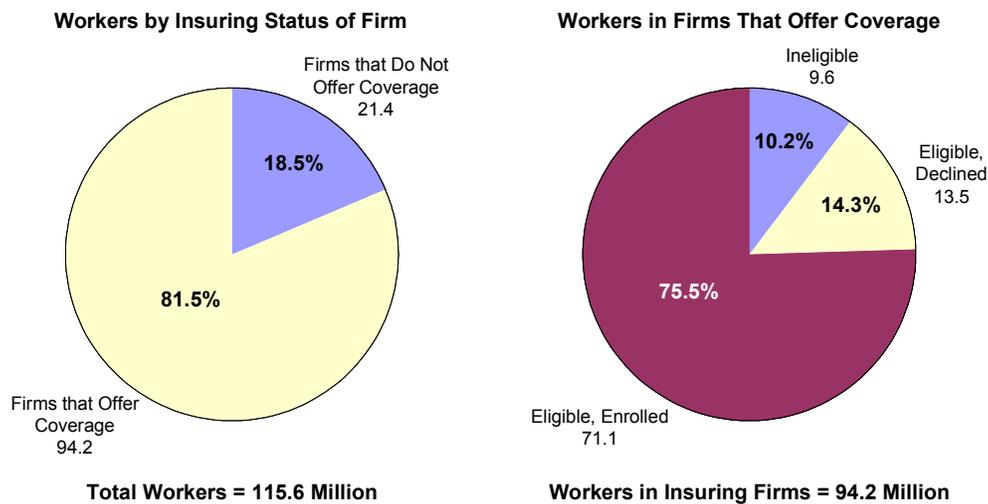
¹⁹ Feature not used for RWJF study.

²⁰ We controlled for worker wage levels, industry, firm size and other characteristics when matching these firms.

- Policy type for covered people (i.e., single/family); and
- Wage level;

The employer health plan eligibility data in the database is important to simulations of policies affecting employers. One important consideration is that many of those who do not have employer coverage work for a firm that offers coverage to at least some of their workers. About 81.5 percent of all workers are employed by a firm that covers at least some of their workers (*Figure 2*). However, only about 75 percent of these people are eligible and enrolled. About 10.2 percent are ineligible and about 14.3 percent are eligible but have declined coverage.²¹

Figure 2
²²Workers by Employer Insurance Status (in millions)



The model controls for the workforce characteristics for each firm in matching individuals to firms. While the firm data provide information on the number of people in the firm with these characteristics, they do not provide the “joint distribution” across these groups (e.g., by age, sex, income etc.). We estimate the joint distribution for each firm using a process called “iterative proportional fitting.” In this approach, we begin with the joint distribution of workers across these variables as reported nationally in the CPS, and scale them in an iterative process so that in the aggregate they replicate the aggregate number of workers in the firm for each worker characteristic. Each non-zero cell of the joint distribution matrix for each firm is treated as an individual worker, who is matched to MEPS individuals based upon these individual characteristics.

²¹ HBSM baseline data based upon Lewin Group Analysis of the February and March CPS data for 1997.

²² For example, it tells us how many workers there are in each of four age groups and the number of workers who are male and female, but it does not tell us how many of the people in each age group are males and how many are females.

Thus, if a firm reports that it employs mostly low-wage female workers, the firm tended to be matched to low-wage female workers in the MEPS data. This approach helps assure that Kaiser/HRET firms are matched to workers with health expenditure patterns that are generally consistent with the premiums reported by the firm. This feature is crucial to simulating the effects of employer coverage decisions that impact the health spending profiles of workers going into various insurance pools. Controlling for the joint distribution of workers within firms is crucial to simulations of program impacts because premiums and behavioral responses vary widely by age, wage level, part time/full-time status and the number of workers with dependents.

C. Medicaid Eligibility Expansion Simulations

HBSM simulates a wide variety of changes in Medicaid and SCHIP eligibility levels for children, parents, two-parent families, and childless adults. It models changes in: certification period rules, deprivation standards (i.e., hours worked limit for two-parent families), “deeming” of income from people outside the immediate family unit and other refinements in eligibility. As under the program, the model simulates eligibility on a month-by-month basis to estimate part-year eligibility.

The model estimates the number of people eligible for the current Medicaid program and under various eligibility expansions using the actual income eligibility rules used in each state for Medicaid and SCHIP. The model then simulates the decision to participate based upon a multivariate analysis of how program participation varies with income, availability of employer coverage, income and demographic characteristics and health status. As discussed above, the model estimates program costs based upon the per-member per-month (PMPM) costs in the existing program in each state by eligibility group, which we adjust to reflect the unique age and sex composition of the newly eligible population.

Our estimates indicate that only about 72 percent of people eligible for Medicaid enroll, although enrollment varies widely by eligibility group (e.g., children, parents, aged etc.). Thus, not all eligible people are expected to enroll in Medicaid when they become eligible. Based upon our multivariate participation analysis, we estimate the on average, Medicaid enrollment for non-disabled adults and children would average about 70 percent for uninsured people and about 39 percent for people with access to employer-sponsored insurance (ESI). Based upon a multivariate model of participation rates in programs requiring a premium, we estimate that premiums reduce participation by 37 percent or more, depending upon the amount of the premium (*Figure 3*).

Our estimates of “crowd-out” (i.e., people shifting from ESI to public coverage) are derived directly from our multivariate model of participation. As discussed above, we estimate that the participation rate for people with access to ESI is about 39 percent. We developed this estimate of take-up rates for people with access to ESI based upon coverage information on children who are eligible under the children’s Medicaid eligibility expansions to the FPL implemented in the early 1990s. Using the 1997 March CPS data, we were able to identify children with a parent who was covered by ESI. Because virtually all employer plans provide family coverage as an option - although workers often pay up to the full cost - we assumed that all of these children were eligible for ESI. This provided a basis for estimating separate participation rates for

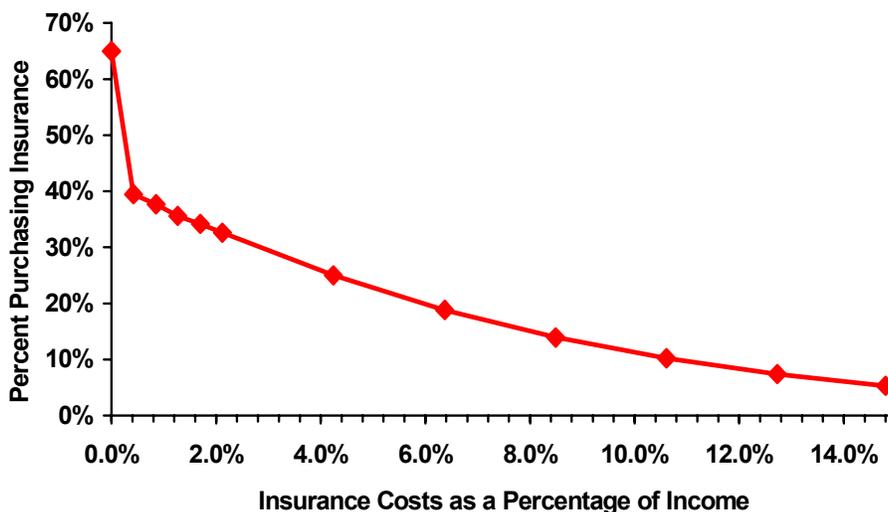
children with and without access to ESI, thus enabling an estimate of “crowd-out” for each policy simulation.

Many eligibility expansion proposals would include a waiting period requirement, which means that individuals must be without employer coverage for at least 12 months to be eligible. The MEPS household data include the information required to simulate the impact of this provision, including exemption for people changing jobs. This approach provides an impact of potential crowd-out with and without the waiting period requirement.

Finally, we estimate an increase in enrollment among the currently eligible but not enrolled population resulting from expansions in eligibility for Medicaid and SCHIP, which has been called the “spill-over.” This estimate is based upon evaluations of programs that expand coverage for children to higher income groups. One study of a coverage expansion for children in California indicated that for each newly eligible child enrolled, up to 0.86 currently eligible but not enrolled children also enrolled. Similar results have been reported for SCHIP outreach programs around the country. These results are used as a basis for modeling the spill-over effect associated with Medicaid eligibility expansions.²³

²³ Christopher Trenholm and Sean Orzol, “The Impact of the Children’s Health Initiative (CHI) of Santa Clara County on Medi-Cal and Healthy Families Enrollment,” (report to the Davil and Lucile Packard Foundation), Mathematica Policy Research, inc., September 2004.

Figure 3
Estimated Percentage of People Who Will Take Subsidized Coverage by Premium



a/ Based upon percentage of people eligible to participate in Medicaid who enroll.
 b/ Probabilities of enrollment initially based upon the percentage of people without insurance who purchased non-group coverage by family income as a percentage of income.
 Source: Lewin Group Estimates.

D. Employer and Employee Take-up Simulations

HBSM models the effects of proposals designed to expand coverage by changing the cost of insurance to the employer and the employee. These include employer tax credits, premium subsidies and other programs that subsidize and/or reduce the cost of insurance to the employer. We assume that premium subsidies will be viewed by employers and employees as a reduction in the cost of insurance, resulting in a price response by both employers and workers. We estimate these price responses using Lewin Group multivariate analyses that measure how the likelihood of offering and taking coverage varies with the price of coverage.

In this section, we explain how we simulate employer and employee take-up in proposals that provide premium subsidies, and present some illustrative results.

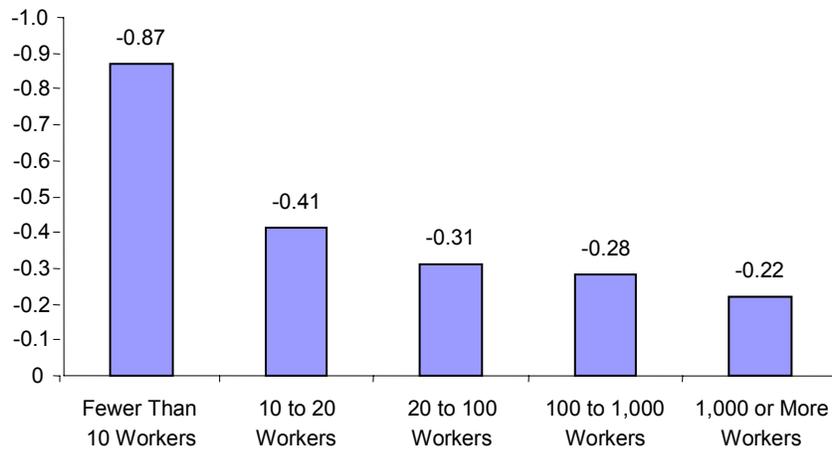
1. Employer Decisions to Provide Coverage

We developed a multivariate model of the employer decision to offer coverage which reflects the impact of price on the employer’s purchase decision. We used the 1997 RWJF Survey of Employers which provides data on a representative sample of establishments. These data include information on the size of the firm, industry and workforce characteristics of

establishments. Data include both firms that offer insurance and those that do not. It also provides information on the characteristics of the health plans offered by each employer including premium costs and the share of the premium paid by the employer. These data were used to estimate a multivariate model that shows how the likelihood that a firm will offer coverage varies with wage level, workforce composition, firm size, industry, other firm characteristics and the price of health insurance.²⁴

The effect of price on the purchase of a good or service is typically summarized by what economists call “price elasticity.” For example, the implicit price elasticity for firms with under ten employees is -.87. This means that for each 1.0 percent reduction in price, there is an increase of 0.87 percent in the number of firms offering insurance. The implicit price elasticity declines as firm size increases to -0.41 for firms with 10 to 20 workers, and -0.22 for firms with 1,000 or more workers (*Figure 4*).

Figure 4
Employer Health Insurance Price Elasticity
Estimates by Firm Size ^{a/}



a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. “Health Benefits Simulation Model (HBSM),” The Lewin Group, August 2003. Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

The model simulates the effect of employer premium subsidies using this multivariate model of the employer decision to offer coverage. For each non-insuring employer in the data, we estimate the change in the price of insurance resulting from the premium subsidies. The model

²⁴ While the RWJF data includes premium information for employers that offer coverage, no data is provided on the premiums faced by firms that do not offer coverage. To model the price effect we imputed premiums to non-insuring firms with a multivariate model of how premium levels vary with the workforce and firm characteristics that we estimated from the RWJF data on insuring establishments.

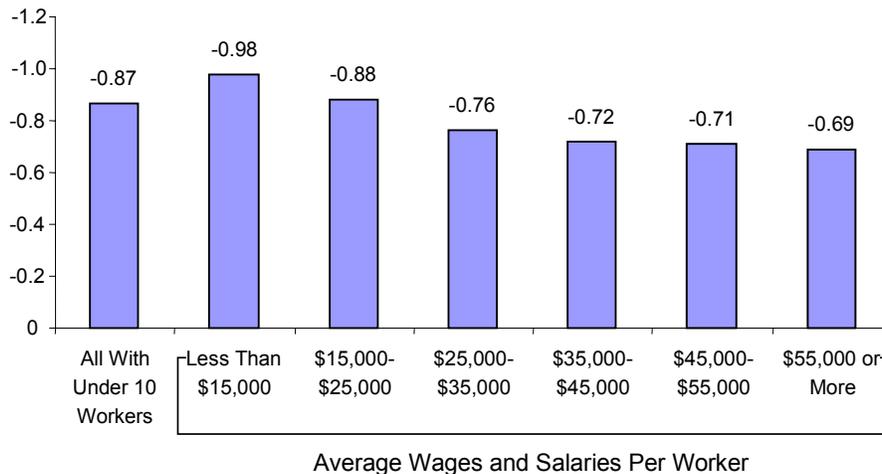
then simulates the decisions to offer coverage based upon the predicted price elasticity for the employer.

The model reflects variations in firm price elasticity depending upon the characteristics of the firm. For example, the model shows that the firm price elasticity tends to decline as age and income rise, as shown in *Figures 5* and *6*. This results in a lower estimated price elasticity among currently insuring firms -- averaging about -0.56 for firms with 10 or fewer workers -- because the employers that offer coverage tend to have older and more highly compensated workers.

In addition, we estimated multivariate models predicting the percentage of the premium paid by the worker using the RWJF employer data. These equations measure how premium shares vary with the characteristics of the firm, their workforce and the amount of the total premium. These amounts are used to estimate the cost of insurance for workers in each firm selected to offer coverage in response to the program.

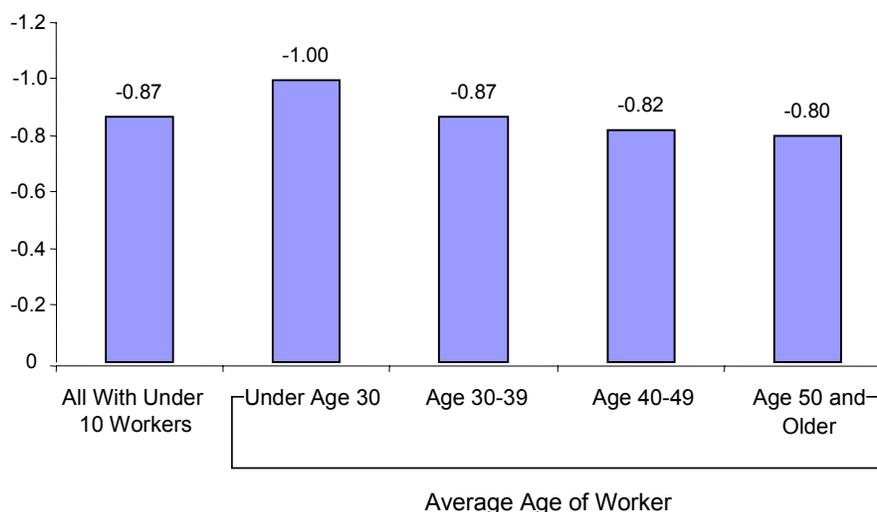
Once firms are selected to offer coverage, we simulate enrollment among workers assigned to these plans. The enrollment decision is simulated with a multivariate model of the likelihood that eligible workers will take the coverage offered to them based upon data reported in the 1996 MEPS data for people offered coverage through an employer. The model measures how take-up varies with the characteristics of the individual as well as the employee premium contribution required by the employer.

Figure 5
Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by Average Wages and Salaries per Worker ^{a/}



a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. "Health Benefits Simulation Model (HBSM)," The Lewin Group, August 2003. Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Figure 6
Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by
Age of Workers ^{a/}



a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. "Health Benefits Simulation Model (HBSM)," The Lewin Group, August 2003. Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

2. Individual Take-up of Health Insurance

Also, some proposals provide tax credits to individuals for the purchase of private coverage, which can include employee contributions for ESI and premium payments for non-group coverage. We simulate the impact of these proposals based upon a multivariate analysis of how the likelihood that an individual will take coverage varies with the amount of the premium. This estimate is based upon a pooled time-series cross-section analysis of private employer coverage reported in the Current Population Survey for the 1987 through 1997 period.²⁵ These analyses indicate a price elasticity of -0.34 percent, which means that on average, a one percent real reduction (i.e., inflation adjusted) in private employer premiums, corresponds to an increase in the percentage of people with insurance of 0.34 percent.²⁶

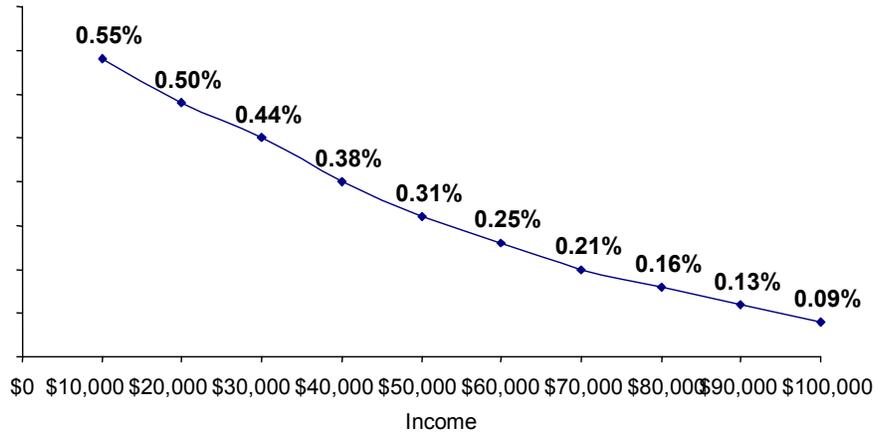
Our price elasticity estimates vary by age, income and other demographic characteristics. For example, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from a high of 0.55 percent among people with incomes of \$10,000 to 0.09 percent among people with incomes of \$100,000 (*Figure 7*) (i.e. a price elasticity of -0.55 to -0.09). Similarly, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from 0.46 percent for people age 20 to 0.30 percent among people age 60 (*Figure 8*) (i.e. a price elasticity of -0.46 to -0.30). Thus, the model shows that older people and

²⁵ This required imputing premiums based upon employer survey data developed by the Kaiser Family Foundation (KFF) and the Health Research and Education Trust.

²⁶ See Sheils, J., Haight, R., "Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy", (report to The National Coalition on Health Care), The Lewin Group, October 18, 1999.

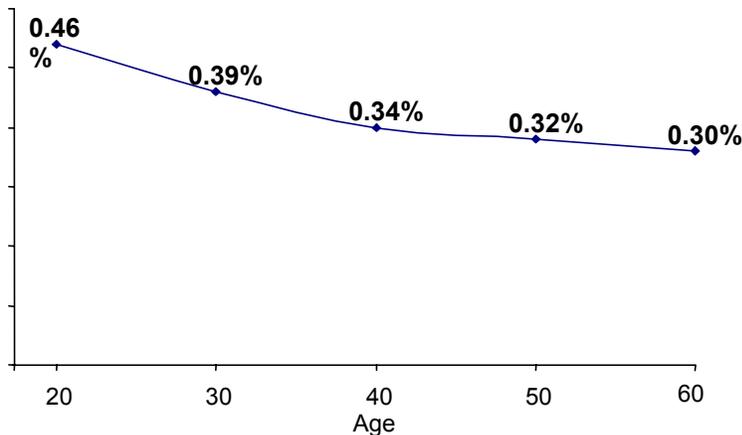
people in higher income groups are less sensitive to changes in price than other population groups.

Figure 7
Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums by Income Level (in percentages) a/



a/ Indicates a price elasticity ranging between -0.55 to -0.09 by income.
Source: Lewin Group estimates.

Figure 8
Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums by Age (in percentages) a/



a/ Indicates a price elasticity ranging between -0.46 and -0.30 by age.
Source: Lewin Group estimates.

3. Wage Effects

We assume that changes in employer costs for health benefits are passed on to workers in the

form of changes in wages. Thus, increases in employer costs are assumed to be passed on to workers in the form of reduced wages while decreases in health benefits expenses are passed-back to employees in the form of increased wages. We assume that this wage adjustment would occur among government employers as well, assuming that government compensation packages over time would be adjusted to remain competitive in the labor markets. Economists expect these wage adjustments will occur in both unionized and non-unionized workplaces.

Our pass-through assumption is based upon the economic principle that the total value of employee compensation, which includes wages, employer payroll taxes, health benefits and other benefits, is determined in the labor markets. Thus, for example, a reduction in the cost of one form of compensation would cause wages and other compensation to be bid up in the labor markets resulting in an eventual pass-through of these savings to the worker. Similarly, increases in compensation costs would lead to reductions in wage growth or other benefits to reflect the change in costs.

There is considerable agreement among economists that these wage adjustments would occur in response to changes in employer benefits costs. However, there is disagreement over the period of time over which these adjustments would occur. It is likely that these adjustments would often take the form of reduced wage growth over-time. However, the full amount of the wage pass-through could take two or more years to fully materialize. For illustrative purposes, we assume that these wage effects occur in the first full year of the program. We also present our wage change estimates on an after-tax basis.

We assume that changes in employer costs for retiree health benefits would not be passed-through to workers as changes in wages. This is because retiree benefits costs are related to prior employer commitments that have little impact on the current labor markets. Thus, savings in retiree benefits are assumed to accrue to the employer. While these changes in employer profits could affect investor incomes, we do not model these effects here.

4. Employer Price Elasticity Estimates Compared

Our firm price elasticity estimates are similar to those estimated by several researchers. For example, Hadley and Reschovsky estimated a price elasticity of -0.63 for firms with fewer than ten workers, and -0.30 for firms with between 10 and 24 workers.²⁷ They showed variations in firm price elasticity by age and income. Gruber estimated a firm price elasticity of between -0.66 to -0.99 for firms with fewer than 50 workers.²⁸ However, some studies show larger firm price elasticity estimates. For example, Feldman estimated a firm price elasticity of between -3.9 and -5.5.²⁹ Blumberg and Nichols recently estimated a firm price elasticity of up to -1.8 for firms with

²⁷ Hadley, J. and Reschovsky, J., "Small Firms' Demand for Health Insurance: The Decision to Offer Insurance," *Inquiry* 39:118-137, 2002.

²⁸ Gruber, J., Lettau, M., "How Elastic is the Firm's Demand for Health Insurance?," (report to the National Bureau of Economic Research), Working Paper 8021, November 2000.

²⁹ Feldman, R., et al., "The Effect of Premiums on the Small Firm's Decision to Offer Health Insurance," *Journal of Human Resources*, vol. 32, no. 4 (fall 1997), pp. 637-658.

fewer than 10 workers, dropping to -0.66 for firms with 10 to 24 workers and -0.25 for firms with 100 or more workers.³⁰

However, all of these price elasticity estimates yield very little change in the number of people with coverage. In all of these studies, the estimated price elasticities are large only for the smallest firms. For example, a 25 percent reduction in premiums (e.g., in the form of a tax credit) for firms with under 50 workers would cover about 3.0 million workers using our price elasticity assumptions, which is only about 10.1 percent of workers without coverage in this firm size group (*Figure 9*). Results are similar under the various firm price elasticity estimates.

**Figure 9
Comparison of Firm Price Elasticity Estimates**

	Lewin ^{a/}	Gruber ^{b/}	Blumberg ^{c/}	Hadley & Reschousky ^{d/}
Estimated Price Elasticity				
Less than 10 Workers	-0.87	--	-1.8	-0.63
10-24 Workers	-0.41	--	-0.66	-0.30
25-100 Workers	-0.31	--	-0.25	-0.135 ^{e/}
Weighted Average for 1-50 Workers	-0.64	-0.66	-1.18	-0.45
Impact of a 25 Percent Reduction in Premiums for Firms With 50 or Fewer Workers				
Change in Number of Workers With ESI (thousands)	2,986	3,079	5,505	2,162
Percent of Workers in Non-insuring Firms Who Become Covered Under ESI	10.1%	10.4%	17.2%	7.3%

a/ John Sheils and Randall Haught, "Covering America: Cost and Coverage Analysis of Ten Proposals to Expand Health Coverage," Appendix A, (report to the Robert Wood Johnson Foundation (RWJF)), October 2003.

b/ Gruber, J., Lettau, M., "How Elastic is the Firm's Demand for Health Insurance?," (report to the National Bureau of Economic Research), Working Paper 8021, November 2000.

c/ Blumberg, B., et al., "The Health Insurance Reform Simulation Model (HIRSM): Methodological Detail and Prototypical Simulation Results," (report to the U.S. Department of Labor), The Urban Institute, July 2003.

d/ Hadley, J. and Reschovsky, J., "Small Firms' Demand for Health Insurance: The Decision to Offer Insurance," *Inquiry* 39:118-137, 2002.

e/ Weighted average for the 25 to 50 worker and 50 to 100 worker firm size groups.

Source: Illustrative analysis by the Lewin Group.

The estimated impact is small because the price elasticity yields a percentage increase in the number of people with coverage in each firm size group, which is already quite small. There are about 19.2 million workers in firms with fewer than 50 workers who had insurance in 2003. In

³⁰ Blumberg, B., et al., "The Health Insurance Reform Simulation Model (HIRSM): Methodological Detail and Prototypical Simulation Results," (report to the U.S. Department of Labor), The Urban Institute, July 2003.

this example, the estimated percent increase for all firms with fewer than 50 workers was 15.5 percent [i.e., the weighted average price elasticity for under 50 workers (-0.64) multiplied by the percent change in premiums (25 percent)]. This is then applied to the number of people in the affected group who now have coverage (about 19.2 million workers) to estimate the change in coverage, which we estimate to be about 3.0 million workers (i.e., 15.5 percent increase over 19.2 million covered workers).

E. Insurance Market Simulation Model

A number of proposals have emerged in recent years that would offer people a community rated alternative to private coverage, resulting in shifts in coverage and possibly adverse selection. Other proposals would alter the way in which insurance is regulated that would have differential impacts by age of policy-holder and other health risk groups. Examples of these policies include proposals to permit small employers to purchase coverage through the Federal Employees Health Benefits Program and creation of “association health plans (AHPs)” that are exempt from state insurance rating regulations.

We developed HBSM into a model of insurance markets. We did this by creating an employer database that holds information on both firm characteristics and the demographic and health spending information for each individual in those firms. Because no such database now exists, we matched firms in the KFF/HET data to individuals in the HBSM MEPS household data such that for each firm, there is one MEPS worker for each of the workers that each firm reported they employed. This type of database is typically referred to as a “Synthetic Firm” database.

Using these data, we can simulate the premiums each firm would be charged in their market based upon the rating practices and state regulations that apply in each state. The health expenditure data in the database permits us to simulate experience rating and medically underwritten premiums. These data provide a basis for estimating how employer premiums would be affected by changes in regulation of premiums. It also permits simulation of the potential for adverse selection under proposals creating government sponsored insurance pools.

In this section, we describe the creation of the synthetic firm data and the methods used to simulate the effect of proposed health reforms. Our discussion is presented in the following sections:

- Creating Synthetic Firm Database;
- Rating methods for insurance pools;
- Take-up for non-insuring firms;
- Employer shift to less comprehensive coverage;
- Worker take-up; and
- Example policy simulation.

1. Synthetic Firms

To be able to simulate employer decisions under alternative health reform plans, it is necessary to develop a database of “synthetic firms” that include both detailed information on employer health plans and the health service use of each worker and dependent in each firm. We create one synthetic firm for each worker in the MEPS data. Once the worker is assigned to one of the KFF/HRET employers, we populate the firm by statistically matching each firm to a sample of workers randomly drawn from the MEPS data for 1999 through 2001, who match the workforce profiles estimated for each firm in the database.³¹

The model simulates health insurance premiums for each synthetic firm based upon the rating rules used in each state and reported health expenditures for workers and dependents assigned to each firm. Premiums are estimated for each firm based upon the rating rules that apply in the firm’s state of residence. This includes the use of age rating and rating bands in the small group market where applicable, experience rating for larger firms and costs for self-funded plans. This simulation of the premiums employers face in the marketplace is crucial to analyses of proposals that would modify rating practices, or offer coverage alternatives such as small employer pools using their own rating methods.

Figure 10 presents the distribution of employers in the Lewin model by average benefits costs per-member-per-month (PMPM) under a standard benefits package. We estimate average premiums of about \$283 PMPM in 2006, which includes benefits and administrative costs for employer health plans over the number of covered workers and dependents. There is wide variability in health plan costs due to differences in administrative costs, claims experience, health status rating and variations in rating practices across states.

Figure 11 illustrates that the variability in PMPM premium costs varies widely across employers by size of group. For example, among firms with fewer than 10 workers, PMPM premiums range from about \$460 for firms in the 10 percent most costly firms compared with average costs of \$157 for firms in the 10 percent least costly firms. By comparison, PMPM premiums in firms with 1,000 or more workers vary from \$372 for the 10 percent most costly groups to \$215 for the least costly 10 percent of firms.

2. Modeling the Effect of Insurance Pools

One of the most crucial elements of insurance pooling models is the manner in which pool premiums are determined. As discussed above, group premiums in today’s market typically vary with the age of the worker, health status and experience (i.e., claims history). Many proposals would use mechanisms for determining premiums in the pool that differ from those used in the insurance markets. This can have a dramatic effect on coverage and premiums in both the pool and the traditional insurance market. There are three ways in which premiums are set under most small group proposals. They include:

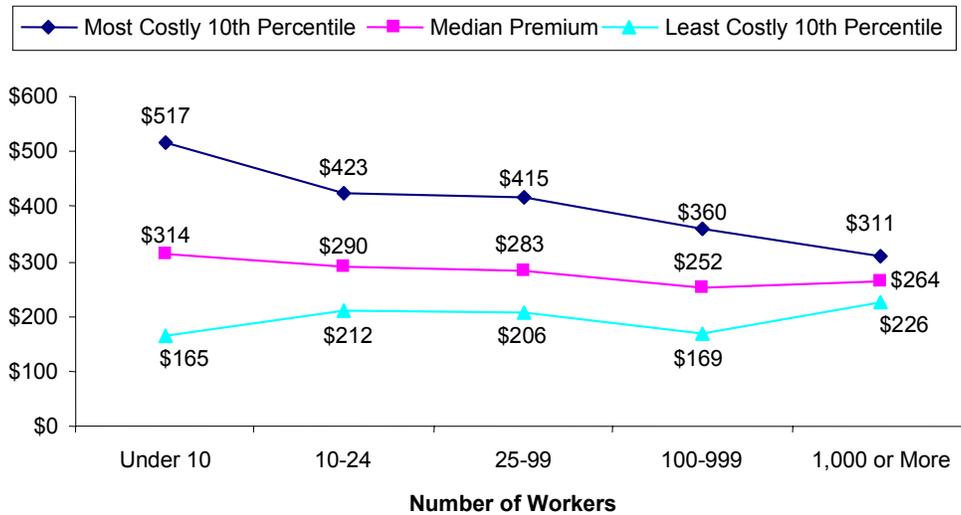
³¹ For example, an insuring firm with five low-wage females who work part-time would be matched to five low-wage females in MEPS who are working part-time and have employer coverage.

Figure 10
All Insuring Employers by Premium Cost PMPM in 2006:
Includes Benefits and Administration ^{a/}



a/ Estimates for a standard benefits package.
 Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Figure 11
Estimated Average Health Insurance Costs (PMPM) for Most Costly and Least Costly 10 Percent of Employer Groups in 2006:



Includes Benefits and Administration ^{a/}

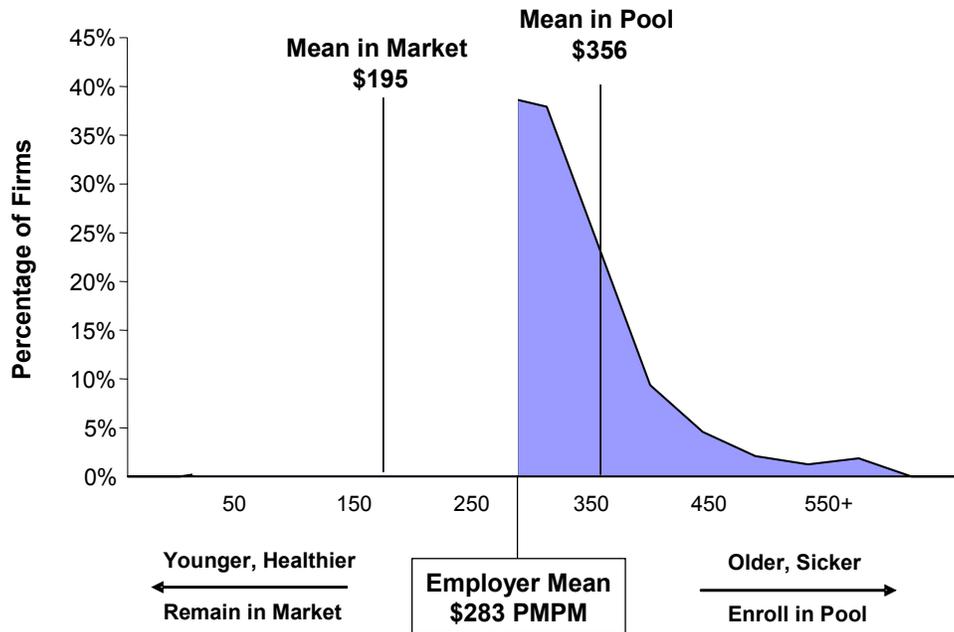
a/ Estimates for a standard benefits package.
 Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

- **Uniform Pool Premium:** In this model, premiums in the pool are set at a single amount per enrollee regardless of age and risk factors. Some of those proposals that would extend FEHBP to small groups would permit plans to charge only a single uniform premium that varies only with family status (i.e., single vs. family etc.). This approach would tend to attract higher cost groups that find the premium in the pool to be less than what they are paying in the traditional insurance market.
- **Risk factor rating of pool premiums:** In this model, plans in the pool are free to set premiums according to any risk factors they choose. This means that pools can fully adjust for health status and age even in states that limit the use of health status and age ratings in the traditional market. Under this model, groups with younger and healthier members would tend to enroll in the pool because they can offer these groups lower premiums than can be charged in the traditional market. Premiums in the traditional market typically increase due to the migration of lower-cost people to the pool.
- **State rating laws apply in pool:** Under this approach, plans selling coverage in the pool must follow the same rating rules that apply to coverage sold in the traditional market, including limits on age and health status rating. Under this model, premiums in the pool are expected to be the same as in the insurance markets, except to the extent that the pool can achieve savings in administration and/or benefits costs.

Thus, if the pool is less able to vary premiums with risk factors than the insurers in the traditional market, the pool will tend to acquire a disproportionate share of high-cost groups, with lower cost people remaining in the traditional market. Conversely, if rating variation in the pool is permitted to be greater than is required in the traditional insurance market, the pool will acquire lower-cost people that left the higher-cost population in the traditional insurance market. This phenomenon - known as "adverse selection" - can have significant implications for the distribution of groups across the pool and traditional insurance markets. This, in turn, will result in premium adjustments in the pool and the traditional insurance market, which will result in further shifts in coverage.

Figure 12 illustrates how the model would simulate a pool that is required to set its premiums based upon the average cost of people enrolled in the pool, regardless of risk characteristic. The figure shows the distribution of insuring firms based on the premiums the firms would pay per-member per-month (PMPM) under current insurer rating practices. If the pool were established with a uniform premium of \$283 - which is our estimate of the average premium in the small group market in 2006 - firms with premiums in excess of that amount would enroll in the pool with the rest remaining in the traditional market. Under this example, the premium in the pool would need to be increased to \$356 PMPM to collect premiums sufficient to meet pool costs.

Figure 12
All Insuring Employers by Premium Cost PMPM in 2006:
Includes Benefits and Administration ^{a/}



a/ Estimates for a standard benefits package.

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

The model simulates these effects on the equilibrium price of insurance in an iterative process. For example, in this example the small pool premium is reset at \$356 PMPM while the premium for those who remain in the traditional insurance market is adjusted to reflect the migration of more costly groups to the pool. Similarly, premiums in the traditional market are adjusted to reflect the accumulation of lower-cost people in the pool. Enrollment in the pool and the private market is then re-simulated at these premium levels. This process is repeated multiple times to arrive at an equilibrium pool enrollment and premium estimate (equilibrium is defined to be the point where total costs are roughly equal to the cost of benefits and administration for the pool).

The model can also simulate the effect of permitting greater variation in premiums by risk factors than is permitted in the traditional market. Under this model, the pool would tend to accumulate lower-cost groups with higher-cost groups remaining in the traditional market. We simulate the resulting changes in premiums in the pool and the insurance markets using the iterative process described above; the pool and the insurance market are in equilibrium (i.e., premiums equal costs).

Pool premiums are affected by other factors as well. For example, some non-insuring employers are expected to enroll as coverage at a lower premium is made available to them. Also, some small group pool proposals permit the sale of coverage that is exempt from state regulations of insurance such as mandatory benefits and solvency standards. This would tend to attract lower-

cost groups that are more willing to accept the reduction in benefits in exchange for the lower premium. Our approach to modeling these effects is summarized below.

3. Employer Decision to Shift to Lower Cost Plans

The impact of insurance pools on firms that already offer coverage is more complex in cases where benefits under the pool differ from those now offered by the employer. For example, the President has proposed the creation of small group insurance pools – called “Association Health Plans (AHPs)” – that would be exempt from state minimum benefits requirements. While the exemption from mandated benefits reduces the cost of insurance (estimated to be 5.0 percent to 7.5 percent), many employers will prefer to continue with their existing benefits.

We simulate the employer decision to shift to the less comprehensive coverage offered in the pool based upon studies of how people respond to changes in the price of insurance in employer groups offering a choice of health plans.³² One study estimated that a 1.0 percent decrease in the price of an alternative source of coverage was associated with a 2.47 percent migration of enrollees to the alternative health plan (i.e., a cross-price elasticity of -2.47). However, these elasticity estimates vary by age and health status such that older and sicker people are less likely to switch plans in response to a given change in price (*Figure 13*).

These elasticity estimates are used to simulate the employer decision to shift into the pool. Using these assumptions, the model tends to shift younger and healthier groups into the pool, leaving higher cost groups in the private insurance market. This causes premiums to increase for those who remain in the traditional insurance markets. Costs for firms shifting into the pool are included when recalculating small group pool premiums.

Figure 13
Plan Switching Price Elasticity Estimates Used in HBSM

<u>Age of Participant</u>	<u>Low Risk</u>	<u>High Risk^{a/}</u>
Under 31	-3.50	-2.78
31 to 45	-2.54	-2.54
Over 45	-2.07	-1.38

a/ People in the 90th percentile of health spending.

Source: Stombom, B., Buchmueller, T., Feldstein, P. “Switching Costs, Price Sensitivity and Health Plan Choice,” *Journal of Health Economics*, 21 (2002), 89-116.

4. Employer Decision to Offer Insurance

Pooling proposals are typically designed to increase coverage among employers who do not currently offer insurance. However, if a significant portion of lower-cost groups migrate to the

³² Stombom, B., Buchmueller, T., Feldstein, P. “Switching Costs, Price Sensitivity and Health Plan Choice,” *Journal of Health Economics*, 21 (2002), 89-116.

pool, premiums would increase for those left in the private market. This increase in private market premiums would result in a partially offsetting reduction in coverage among those with the highest costs.

The model simulates these changes in coverage for insuring and non-insuring firms. The model does this by calculating the difference between the premium they would pay for comparable coverage in today's insurance markets and the amount they would be charged under the rating methods used by the pool. Non-insuring firms are simulated to take the coverage based upon the change in price and our estimated firm price elasticity estimates presented above. Similarly, these price elasticity estimates are used to simulate the discontinuations of coverage among those facing premium increases in the private market.

5. Example Policy Simulation

President Bush has proposed the creation of AHPs which are essentially small group insurance pools. AHPs could be established to provide health insurance coverage to small employers (typically defined as firms with under 100 workers), within or across state boundaries. Costs within AHPs would be reduced by exempting these plans from state regulation of insurance, including mandatory benefits and solvency rules. Savings may also result from administrative efficiencies and large group purchases of health services. However, it is unclear whether the AHPs would be exempt from state regulations of rating practices.

We simulated the impact of this proposal under two alternative assumptions. In the first scenario, the AHPs are assumed to be required to rate policies in the same way they are rated in the private market under current law. This means that the primary cost advantage of the AHPs is that they are exempt from state mandated benefits and certain other regulations. In the second scenario, we assume that AHPs are exempt from state regulation and are permitted to set premiums for older and sicker groups at higher levels than are permitted under current state rating regulations. This means that the pool would have an additional cost advantage, in that they can charge younger and healthier groups a lower premium than is permitted in private insurance markets.

Under the first scenario (i.e., under current state rating laws), we estimated that AHP enrollment nationally would be about 6.0 million people. The number of uninsured would be reduced by about 400,000 people (*Figure 14*). We estimate that premiums in the AHPs would be about 5.2 percent lower than in the traditional insurance market resulting in about 490,000 uninsured people enrolling in the AHPs. However, premiums in the traditional market would actually increase by about 0.5 percent resulting in a partially offsetting reduction in coverage of about 90,000 people.

In the second scenario, we permit AHPs to vary premium with risk factors beyond what is permitted under current state laws. Under this scenario, about 13.4 million people would be induced to take coverage through the AHPs. About 924,000 uninsured would obtain coverage. This would be partially offset by a reduction in coverage of about 198,000 people. These are people in firms facing an increase in premiums in the traditional market. There would be a net reduction in the number of uninsured of about 726,000 people under this scenario.

Figure 14
Summary Comparison of Alternative Estimates of AHP Impacts ^{a/}

	AHPs Subject to State Rating Regulations ^{b/}	AHPs Exempt from State Rating Regulations ^{c/}
Reduction (Increase) in Number of Uninsured (1,000s)	400	726
Uninsured Who Gain Coverage (1,000s)	490	924
Insured Who Lose Coverage (1,000s)	-90	198
Percent Changes in Premiums	-0.1%	1.0%
People Covered in AHP	-5.2%	-14.1%
People in Traditional Insurance Market	0.5%	2.5%
AHP Enrollment (1,000s)	5,990	13,388
Newly Insuring Firms (1,000s)	490	924
Firms Shifting to AHP (1,000s)	5,500	12,464

a/ The CBO and The Lewin Group studies assume that AHPs are open only to firms with fewer than 50 workers.

b/ Assumes AHPs are exempt from minimum benefits and reserve requirements but not exempt from state ratings regulations. See "Bush and Kerry Health Care Proposals: Cost and Coverage Compared," The Lewin Group, September 2004.

c/ The Lewin Group estimates of AHP impacts assuming that AHPs are exempt from state rating regulation.

Source: Compiled from published estimates.

This example illustrates the model's ability to simulate the impacts of changes in the rating practices permitted under small group pools.

F. Tax Policy Simulations

The Current Population survey data provide information on tax payments and marginal income tax rates. These data are used to impute average and marginal tax rates for households in MEPS. These data are used to estimate the tax expenditure for health benefits and to estimate the value of tax deductions for health benefits.

Based upon an analysis of the CPS data on tax filings, we estimate that about 40 percent of all uninsured have no tax liability and are not required to file a tax return (*Figure 15*). However, about half of these people file even though not required to do so, presumably so that they can obtain any refund they are entitled to.

Figure 15
Distribution of Insured and Uninsured Tax Filers by Marginal Tax rate in 2004

	With Earnings	Without Earnings	Total	With Earnings	Without Earnings	Total
All Tax Filing Units in the US				Uninsured Tax Filing units in US		
Total Potential Filers	119,981	39,367	159,348	23,004	5,016	28,020
Non-Filers	9,451	20,377	29,828	2,848	3,330	6,178
All Filers by Marginal Tax Rate				Uninsured Filers by Marginal Tax Rate		
0	18,855	11,203	30,068	5,982	648	6,630
10	15,679	2,470	18,149	4,992	354	5,346
15	43,914	3,447	47,361	7,389	484	7,873
27	25,537	1,394	26,931	1,424	140	1,564
30	4,437	359	4,796	242	43	285
35	870	60	930	60	9	69
39	1,235	54	1,289	67	7	74
Total Filers	110,530	18,990	129,520	20,156	1,686	21,842

Source: Lewin Group Estimates Using the 2005 Current Population Survey (CPS) Data.